

SUPPLEMENT.

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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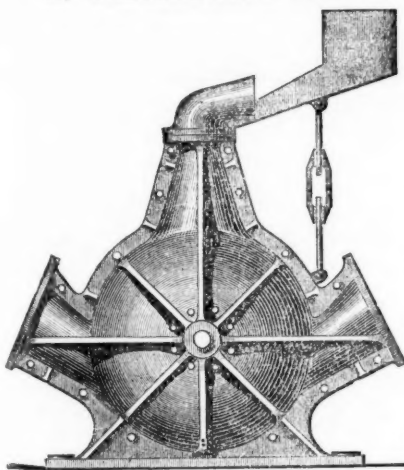
No. 2409.—Vol. LI.

LONDON, SATURDAY, OCTOBER 22, 1881.

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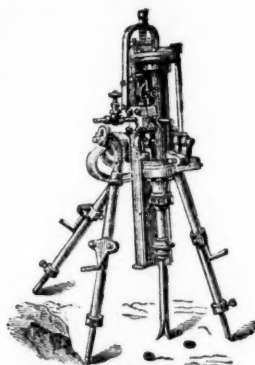
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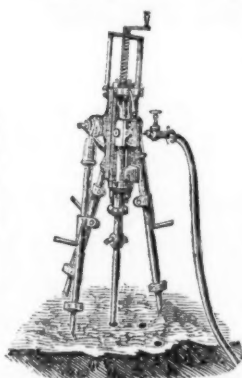
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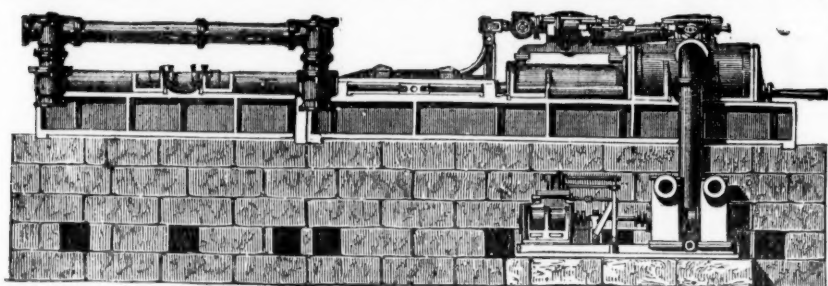
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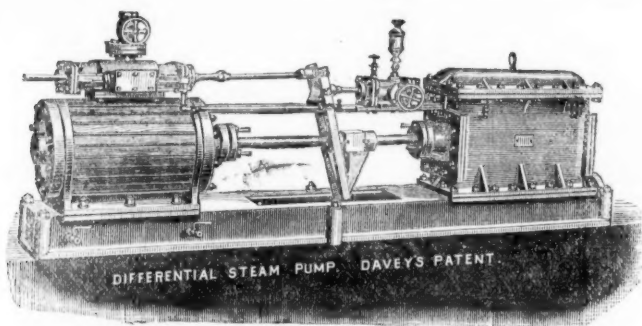
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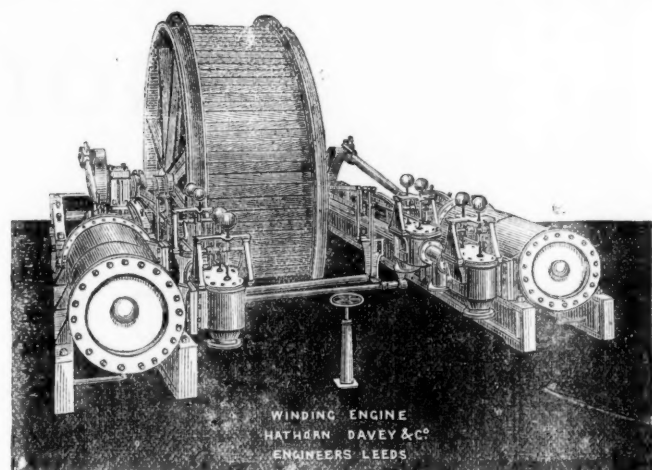
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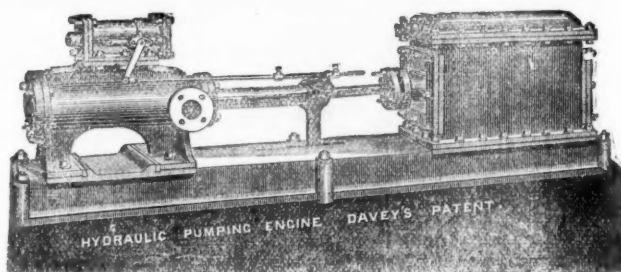
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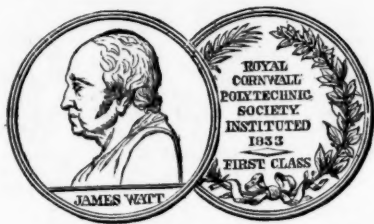
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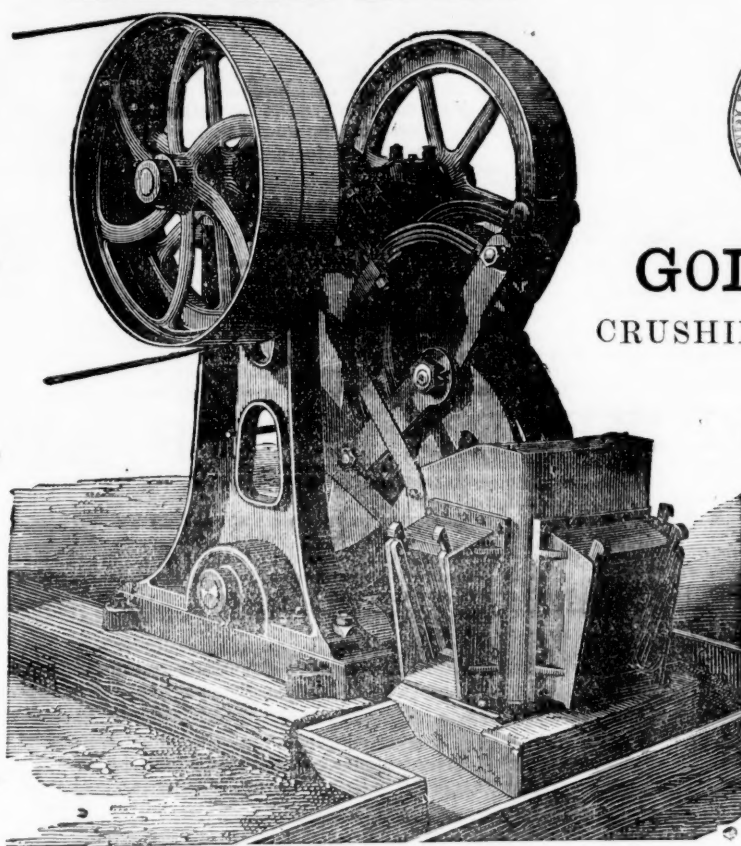
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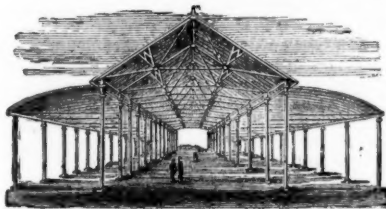
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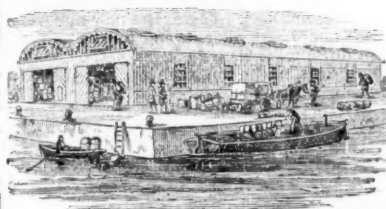
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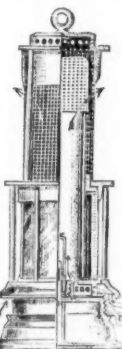
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LEGITIMATE AND ADVANCING MINES.—A LIST of the MOST SECURE MINES, with their present and future prospects, selected for profitable investment, with remarks on the present mode of forming Mining Companies to the injury of fair mining enterprise, is being published by Messrs. THOMPSON and SON, Plymouth, and will be forwarded post free on application.

Original Correspondence.

QUICKSILVER.

SIR,—“Investigator” in last week's Journal in giving some figures relating to the New Almaden Quicksilver Mining Company says, referring to us, “will probably cause them some surprise.” We are surprised and pleased to find that “Investigator” this time quotes the statistics correctly (excepting the prices, which fluctuated). The following we think more useful, with London price on Dec. 31 of each year:—

	Ore raised—tons.	Per centage.	Yield in flasks.	Price per flask.
1874	11,727	2.96	9,084	£24 0 0
1875	15,553	3.35	13,648	10 10 0
1876	16,658	4.72	20,549	8 5 0
1877	18,615	4.93	23,996	7 5 0
1878	18,472	3.28	15,852	6 7 6
1879	27,532	2.85	20,514	6 10 0
1880	30,677	2.92	23,465	6 7 6

By the above it will be seen that there is but slight difference in the percentage produced by the New Almaden Mine in 1874, the high price year (24s.), and 1880, the low price year (6s. 7d.)—viz., 1874 per centage 2.97, 1880 per centage about 2.92. At the high price the mine only produced 9084 flasks; at the low price it made the large quantity of 23,465 flasks, so that at 6s. 7d. per bottle the mine turned out about 150 per cent. more than it did at 24s. per bottle. “Investigator” goes on to make another mistake. He writes—“There is yet a point worthy of attention—that the importations into London for nine months ending Sept. 30 are but 48,926 flasks, compared with 55,985 to same date in 1880.” Now “Investigator” in the Journal of Sept. 24 gives the entire production of Spanish and Italian as 48,200 bottles, Austrian importations as 1351, in all 49,551 bottles. The official returns give the entire importation under 50,000 bottles for the 12 months of 1880, so that “Investigator” for the nine months of last year makes an error of 6000 bottles at least.

Great Tower-street, Oct. 18.

JOSEPH BENNETT BROS.

FOREIGN IRON AND COAL MINES.

SIR,—Can any of your readers give me a few reliable statistics of the date of discovery and subsequent progress of the yield of iron and coal in foreign countries, and also what countries now manufacture machinery, and to what extent? A reference to where I can obtain the above information would be sufficient, to save the trouble of your readers.—Oct. 19.

J. H. M.

SOUTH AFRICAN DIAMOND FIELDS.

SIR,—During the 12 months that I have been absent from Kimberley for the benefit of my health the changes have been very great indeed. When I left there were only four mines, comprising in the aggregate 3397 claims of 30 ft. square, registered in the names of 556 claimholders, the whole of which have since been formed into public companies. Many of these claims were rich, but a large number were of little or no value; but during the last 12 months, owing to the great success of one or two companies that were first formed, there has been a perfect mania for forming companies, and every doubtful concern has been floated whether there has been a probability of success or not. Claims that were capable of paying were put into companies at two, three, and even four times their true value, and many claims that never can pay have been put in as dividend paying concerns. In some paying companies large dividends were arranged for one or two quarters, which had the effect of sending up shares to three times their true value, when some were fortunate enough to sell out and retire. This state of affairs is bad enough, but it has not ended here; unscrupulous parties acting on the credulity of capitalists have started mines in almost every direction, and I have not the least doubt but that the practice known as salting has been extensively resorted to. Since my return I have been engaged to inspect and report on some new mines, but as my reports have not appeared in any prospectus puffing circular I presume they are not the kind of reports required.

Not content with diamond mines, some attempt has been made to manufacture gold mines, and I have seen telegrams published in various parts of South Africa stating that quartz reefs had been found near Kimberley yielding as much as 20 ozs. of gold to the ton. Reports were printed from men professing to know a great deal about gold mining, and who offered to purchase a small slice for a large sum, or at least so said the printed report. Knowing something of the geological features of the reported gold district I was somewhat anxious to see a rich gold reef in trap-rock. I have examined at least 100 samples from the supposed reef, which were composed principally of very indifferent looking quartz and floatstone adhering to pieces of greenstone; and speaking generally a more unlikely looking stuff for the production of gold I have seldom seen. I was shown two samples of gold said to have been found in the same place, but they were certainly not the spontaneous production of that locality, and gave me the idea of having travelled some thousands of miles. It cannot be wondered if after such a state of affairs everything in the place should be dull, and that persons who have invested largely should be anxious as to the future. The fact is the affairs on the fields are just beginning to find their true level, and notwithstanding the numerous complaints of the dullness of the share market many shares even now are selling above their value.

There is no question as to the stability of many of the mines here, and it is with sincere regret that I see such good mines so heavily handicapped. Many of the mines if properly managed are capable of paying regular dividends of from 12 to 20 per cent. per annum on about half the amount at which the claims were put into companies, and one or two may do a little more, but I very much doubt if many of the companies will ever pay a legitimate dividend. It will, therefore, not surprise me to see them placed on the European market. I hear that several diamond mines have already been offered for sale in England, and if the reports here are to be relied on they have been offered at about five times their true value. I am, therefore, bound to caution English capitalists who have money to invest against buying into old and expensive diamond mines without thoroughly investigating the present state of the mines and getting the opinion of some disinterested and thoroughly competent mining man on the matter. In diamond mining more than any other past accounts and past profits are not the slightest guide to the future, and interested parties are apt to overlook such trifling contingencies, as the possible contraction of the diamond formation in depth or an influx of water sufficiently large to retard the operations of companies.

Griqualand West is to all intents and purposes the land of diamonds, and has diamond mines on a large scale. I shall, therefore, advise capitalists and those persons who are anxious to invest money in diamond mines not to lose sight of the fact that there are “as good fish in the sea as ever were caught.” All that is required to secure them is practical economy, earnest application, selection of the most favourable localities, and honesty of purpose. There are one or two new mines opening in this district that will turn out rich and will yield large quantities of diamonds, and I should like to see them in the hands of good English companies; but there are other new mines (so called) which I hear are being offered to English capitalists that will never yield a legitimate sixpence. It is, therefore, absolutely necessary that intending investors should exercise great caution. In being so candid in cautioning my mining friends at home I do so at the expense of local popularity, because here if a person is candid enough to write the truth some of the papers attack him with a virulence that would do credit to O'Donovan Rossa or the dynamite convention. I will send you reports of the various mines as soon as I am able.

Kimberley, South Africa, Sept. 16.

Mining Engineer.

P.S.—Since writing the above a report is current that a Mr. Harrison has gone to England for the purpose of floating what has been called the Frankfort Mine. I sincerely hope that such is not the case. In the meantime for the benefit of my friends in England I must inform them that I have inspected and reported on this property, but the report has not been published, and if it were it would not induce people to buy claims. The owner of the property has pressed me to make a second examination and report for the English

market, to which I wrote the following reply:—“SIR,—In response to your urgent request that I should make a second examination of your Frankfort property, permit me to inform you that I shall be pleased to do so at the proper time. In the meantime it is my duty to inform you that in the present undeveloped state of the mine I cannot conscientiously give a report that would be satisfactory to you or myself.—Yours obediently, T. C. KITTO, M.E.”

THE DIAMOND DRILL IN AUSTRALIA.

SIR,—Mining has now become a settled and respectable industry in these colonies, but had begun to languish in some of the older mines (gold more especially) as depth was reached, and the reefs either broke or grew poorer till the advent of the new and cheap prospector. The Diamond Drill, by proving the ground quickly and easily, gave a new impetus and inspired greater confidence by showing the permanence of the lodes at greater depth, as see the following extract from to-day's paper bearing especially on one of the Victoria mines, although various others in the same district (Stawell) have also benefited largely. The diamond drill, it is remarked, has made a conspicuous success. The Australasian recently reported that in the Crown Cross United Mine at Stawell the diamond drill was set to work at a depth of 1322 ft., and on boring 375 ft. further had pierced a reef of about 10 ft. in thickness. The core has been tested, and is found to contain gold at the rate of 17 dwts. 3 grs. per ton, a prospect with which the company is so satisfied that it purposes at once to begin to sink for the reef. This work will occupy a year, and will cost about 4000l. The discovery is entirely due to the new and valuable instrument of which miners have recently secured the use. Without it it is quite possible that the company would never have incurred the expenditure necessary to sink a shaft. This is not the only, though it is the most prominent, instance of the usefulness of the drill as an instrument for prospecting. It is not long since that its use in a claim at Hepburn led to discoveries which improved the quotable nature of the claim to the extent of 10,000l. At Stawell, we learn that the discovery in the Crown Cross United Mine of a paying reef at a depth of 1700 ft. has infused a new spirit of enterprise into mining work. The discovery in itself of paying quartz at this great depth is of vast importance as giving an enormous extension to the area of our known workable ground, and it immensely enlarges our views of the permanence of gold mining in the colony. But the great point of interest is that the discovery was made by means of an instrument which reduces the cost of underground exploration in a very great degree. It is quite natural that the utility of the instrument should specially strike the public mind when it leads to a positive discovery. But it is easy to see that it is equally useful when its use indicates at a small outlay the inutilty of expending money in any certain direction. We have to count not only what it gives, but also what it saves. It is satisfactory to see the rapidity and enterprise with which companies are adopting these useful adjuncts to the art of the miner. The general use of the drill will give greater certainty and precision to mining work, and while it will often, doubtless, lead to eminently satisfactory discoveries, it will also tend to materially improve mining as a sphere of investment.

Again, from Melbourne a telegram of Sept. 1 (in this day's Sydney Morning Herald) says the value of the diamond drills is daily more appreciated. There were seven applications to the Minister for Mines for drills to-day, one being for coal boring, and the remainder for quartz and alluvial boring. It was represented that the discovery of the Smeaton and Kingston gold fields are due to diamond drills. The Minister recognised their importance, and promised the use of those available, and intimated his intention of having four additional drills made immediately.

By its means, also, a good seam of coal has been discovered at 630 ft. in our own colony (New South Wales), and it is likewise proposed to use it out in the Far West for boring for water, &c. And now that the practical working of it is becoming better understood by our mining engineers it will probably lead to a certain increase in steady mining investment, because based upon assured discoveries beforehand.

A good deal of attention is being again directed to gold mining here (New South Wales), and several fresh prospecting companies lately formed, but the known extent of our auriferous district is large enough to give scope for 20 times the capital that a young colony like this can afford to divert from its ordinary pastoral and trading pursuits. On the Wentworth freehold estate the Reform Gold Mining Company (one of the small leasehold mines) has just declared another dividend; this time it is 9s. per 25l. share, making in all 36l. per share since June 30; and a cash offer of 25,000l. was made for this one mine yesterday. I see one of the Copeland gold field companies has crushed 130 tons of stone for a yield of 1050 ozs. of smelted gold, whilst the Hidden Treasure on the same field expects something nearly as good from its next crushing. The Mountain Maid and the Prince Charlie, also at the Copeland, likewise give very rich yield, and I fancy if these returns were compared with the best of the so-much vaunted Indian mines the latter would come off a very second best. There is a new discovery near Grafton, and the reefs are taken up for several miles; none of the prospecting shafts are down more than 20 ft. as yet, but some of the trial crushings show 4 ozs. to the ton, with good sized lodes, and shares are difficult to be got at any reasonable price from the first discoveries.

Gympie (Queensland) is also turning out splendid returns from the new finds at the deeper levels, and one mine which was offered at 5000l. within the last 18 months is now worth 150,000l., and 120,000l. cash was refused last month for it.

R. D. ADAMS.

Sydney, Sept., 1881.

GELLIVARE IRON ORE EXPLOITATION.

SIR,—As one proof of the practicability of an undulating railway worked by gravitation, I alluded to most important results from experiments made by the Government at Portsmouth Dockyard, having for their object “to illustrate by theory and experiment the action which takes place under varying circumstances; in iron railway bridges.” Two eminent officers (R.E.) superintended the erection of an inclined plane or scaffold supporting a railroad, of which 30 ft. of the upper part was straight, and inclined to the horizon at an angle of 46°. The course of the bars was then bent into an arc of a circle of 50 ft. radius, by which the upper and inclined part of the railroad was gently and imperceptibly connected with the horizontal portion beneath, which from the point of its junction with the curves was extended 18 ft. to the place where the end of the trial bars was fixed. These were laid horizontally, so as to form a continuation of the railway, with this difference, that whereas the railway bars were supported by chairs of the ordinary kind, fixed at intervals of 4 ft. 6 in. to the framework of the scaffold, the trial bars were sustained by chairs of a peculiar construction at each end only, each trial bar being cast with a projection beneath, and kept in place by a pair of wedges. Upwards of 400 experiments were made with this apparatus, with results equally new and important, developing, for the first time, the fact that a given weight passing rapidly along a bar produces a greater deflection in that bar during its passage than it would have done had it been suspended at rest from the centre of the bar. The car ran down the plane, passing over the trial bars with the velocity acquired, deflecting or fracturing them, as the case might be, the car naturally sinking downwards, the deflection amounting to as much as 2.67 in., the car jumping off the trial bars. In the case of breaking the bars the car lost its support, rolling head-over-heels into the yard. The car, notwithstanding this crucial ordeal in passing the trial bars, ran up the second inclined plane, identical dimensions to the first or descending plane, nearly as high as the point whence it had been released from the first. Now, when it is borne in mind the length the car actually traversed was 188 ft., of which 36 ft. was a dead level, plus 10 ft. trial bars, and 82 ft. diminished curve, whereas my series of undulations is, as compared with the above, to the extent of only 127 ft. in each undulating plane, ellipse, or cycloid, the centre of gravity below the single rail by force of gravity and automatic mechanical pressure attaining a very high velocity, which the precited Royal Engineer officers, page 182, state was quite impossible with a surface or horizontal railway upon which they operated. When the car, sinking by the deflection of the trial bars, attains nearly the identical horizon whence it started, it stands with common sense that my system is indisputable.

The Mechanics' Magazine states (vol. 20, p. 358) the dangerous velocity necessary for the full development of undulating power defeats the desired result (in the case of a surface railway). It rests to find out a safe and effectual *modus operandi*. Nothing can be more distinct than this avowal of the feasibility of an undulating railway, with the centre of gravity below the rail, making it impossible for the car to leave the rail with the greatest velocity. Pambour says (p. 509), “The gravity of the train in descending an incline compensates the work required from the engine by that same gravity in ascending the contrary plane.” What more conclusive in favour of my system than the statement of the late engineering celebrity, Nicholas Wood, that “in every instance where the descent of the descending plane, even of a surface railway, was accomplished in a less interval of time, the distance run over the ascending plane was much greater, showing that velocity is alone necessary for attaining such” (p. 230). He found with steep inclines no brake was sufficient to restrain the velocity, endangering life and property. The brake was perfectly powerless, and of no use in heavy inclines or steep gradients. All eminent practical authorities on the working of railways fully admit the vastly superior advantages of the undulating system, its application being quite impossible with the existing system of surface railways. The contour of the waves of the ocean and the undulations of the atmosphere are cycloidal, giving birth to the idea of the construction of a series of cycloids or epicycloids connected with one another, forming a serpentine lateral undulating line of arcs, alternately concave and convex, to a straight line joining the two extremities of the railway. I dare not presume encroaching further on your valuable space, but hold the plan of the Government trajectory, and their 400 experiments, and the fullest information at the disposal of legitimate enquiry.

W. J. THOMPSON.

Little Tower-street, Oct. 19.

INDIAN MAMMOTH GOLD MINE.

SIR,—It is getting on for two years since a very flowery sort of prospectus induced me to apply for 100 shares in the above mine. I paid 25l., and was allotted the desired number of shares, but from that time to this can get no sort of information regarding the mine. About a year since a letter to the secretary brought me the information tardily given that there was some hitch in the title deeds. Another letter to the secretary some weeks past elicited no reply of any kind. Surely some information ought to be given to the shareholders. I saw a notice a long time in the Journal that the company was to be wound-up, but surely some information of this should have been given to us officially. One-fourth of the capital is paid, and I am looking forward to getting my 25l. back, with what prospect of success perhaps some of the readers of the Journal may kindly enlighten me.—Leamington, Oct. 15.

MEDICUS.

RIO GRANDE DO SUL (BRAZIL) GOLD MINING COMPANY.

SIR,—In perusing the Journal of Oct. 15 I observe a very lengthy communication from Mr. Hubert Bankart, dated Lavras, Aug. 20. I notice more particularly his charges against me of utter recklessness, untruthfulness, and incapacity. The last charge is beneath my notice, but I could not allow the two former to pass without some comment. My mission to Rio Grande do Sul was to have removed certain obnoxious clauses inserted in Mr. Bankart's agreement, to examine the prospect of the mines, with the progress and general management. The first of these I had, after considerable difficulty, cancelled and verified by the British Consul. As to the mines I have only to refer your readers to my published report of June, which I am thoroughly prepared to confirm in all its bearings. For the progress and general management under Mr. Bankart it is my painful duty to state that very little work had been done at the mines. There was at Lavras house-building, ornamentation, &c., going on, and at Aurora there were several natives engaged in the most monstrous work for anything called mining I ever saw; but to my greater astonishment I was informed that their chief, Mr. Bankart, had only visited the principal mine (Aurora) once from the time of the arrival of the staff from England—a period of some months. The most astounding part of the whole was that he would not allow Captain Pooley and the Cornish miner, who were sent out ostensibly to conduct the mining operations, to have any control or give any directions, or even visit the mine except he sent them on a message. The working of this valuable lode, with visible gold frequently occurring, was entrusted to an ignorant Brazilian peasant, with a staff similar in capacity to himself.

As to the other statements made by Mr. Bankart with reference to myself they are without a shadow of truth, and were it needful the entire staff, who have returned to England, would affirm all I have said, and a great deal more. I can quite understand Mr. Bankart's spleen against me for discharging him; but this, I believe, no novelty in his career.

H. CLEMES.

RIO GRANDE DO SUL (BRAZIL) GOLD MINING COMPANY.

SIR,—I notice in the Journal of last week a letter, signed “Hubert Bankart, Chief Engineer and General Administrator of the Rio Grande do Sul Gold Mining Company (Limited), in Brazil.” I am desired by the directors to say that Mr. Hubert Bankart has been dismissed the service of the company months ago, as you will perceive by the within report, published in June last. If you will give publicity to this letter and report I shall be obliged. J. A. MORGAN, Secretary.

Finchbury Circus, London, Oct. 17.

THIRD HALF-YEARLY REPORT.

1.—The directors had fully anticipated that before the meeting of shareholders on this occasion they would have been able to state that the mines were in full working order. They, however, much regret that quite unforeseen circumstances have considerably interfered with active operations at the mines. For convenience sake they repeat the last clause in their report of November, 1880, which was as follows:—“The directors on the 8th instant received the following telegram from their agents at Rio Grande do Sul:—‘Can we draw at sight for 1000l.?’ Work commenced. This leads the directors to hope that all matters connected with the purchase are virtually completed.”

2.—In the month of December last, however, the directors received from Mr. Bankart a document, being a contract executed by him as agent for this company, bearing date the 2nd September, 1880, containing in addition to such clauses as were contained in the original contract the following paragraph:—“And furthermore it is hereby clearly and distinctly understood, anything to the contrary notwithstanding, between the said Rio Grande do Sul (Brazil) Gold Mining Company (Limited), represented by their legally authorised attorney, Hubert Bankart, and as the said Antonio da Costa Chaves Faria, Henrique da Silva e Souza Liberal, and Themistocles Petrocchino, liquidators as aforesaid, and Henrique Harper, the duly appointed attorney of the mortgage creditors, that in order to avoid any inconvenience, loss, or prejudice to the holders of share warrants, which may be caused by the depreciation in the value of the said securities or their becoming discredited, the said Hubert Bankart, now the Chief Engineer, General Manager, or Superintendent of the Rio Grande do Sul (Brazil) Gold Mining Company (Limited), in Brazil, shall not, except in the case of illness, accident, or other justifiable cause, resign his office of Chief Engineer and General Manager or Superintendent in Brazil, nor be dismissed from his office by the London Board of Directors for and during the term specified in the Articles of Association of the Rio Grande do Sul (Brazil) Gold Mining Company (Limited), and as agreed between the said Joao Carlos Backheuser, Antonio da Costa Chaves Faria, and Henrique da Silva Souza Liberal, on behalf of the vendors, and Henrique Harper on behalf of the mortgage creditors, unless and until a just cause or reason be given, and due notice in writing be sent to the said shareholders in Brazil, or to the permanent committee which shall agree with the said resolution.” At the same time, the legal conveyance for which the directors had been waiting for such a long time at last arrived, bearing date the 25th November, 1880, containing the following extraordinary clause:—“And finally that all the property sold by the company, party hereto of the first part, to the Rio Grande do Sul (Brazil) Gold Mining Company (Limited), party hereto of the second part, for the above-mentioned consideration money of fifty-five thousand pounds in shares, shall be and constitute the real guarantee for the value of the said shares during the first three years from and after the date hereof, and consequently if the company, party hereto of the second part should be wound-up or be bankrupt within the said term of three years, the said property shall revert untouched to the ownership and possession of the permanent committee appointed at the general meeting of shareholders, held on the 3rd of June of the present year, which said committee shall dispose of the property as by law provided.” This was the first intimation the directors had of the vendors making any such conditions, and much less did they anticipate that their own agent would be a party to contract and conveyance which were directly contrary to the contract as set out in the Memorandum of Association.

3.—Immediately on the receipt of these documents the directors forwarded the following telegrams to the vendors, Mr. Bankart and Messieurs Holtzweissig and Company, their agents at Rio Grande do Sul, 24th December, 1880:—“To the Vendors.—Directors precluded by law from accepting contract with reversion clause.”

“To Mr. Bankart.—Directors precluded by law from accepting contract with reversion clause. Holtzweissig so informed. Your salary stopped till altered.” “To Messieurs Holtzweissig and Company.—Retain all property belonging to company. Draw no drafts till contract altered.”

4.—The directors do not wish here to enter more fully into the correspondence

and telegraphing that ensued, nor to describe the annoyance it caused them; but in the month of January they decided to send out Mr. Henry Clemes, the eminent mining engineer of Cornwall, to the Brazils, to negotiate for the expunging of the objectionable clauses, and to report fully upon the mines; and they gave him power, if he considered it desirable, to dismiss Mr. Bankart, or any other of the employees of the company.

5.—The directors have no doubt that Mr. Clemes will reach this country in time to attend the half-yearly general meeting, or, at all events, to submit his full report. In the meantime, the directors have received from him the following telegram dated April 6:—"Clauses cancelled. I have discharged Mr. Bankart from his position with the company, and shall install Capt. Edward Pooley, jun., as chief in charge of the mines and property till fresh arrangements made. I find the Aurora gives good prospects for turning out large quantities of ore. Lodes masterly and regular embedded in congenial rock. Veinstone moderately hard"—which has since been confirmed by letters from Mr. Clemes.

6.—Mr. Bankart has commenced an action here for the recovery of arrears of salary, which the directors feel bound to resist to the utmost.

B. D. KERSHAW, Chairman.

EXTRICATION OF GOLD AND AURO-PYRITES FROM THE MATRIX.

SIR.—Mr. Lock's effort in January last at two meetings held at the Society of Arts, to promote the investigation of the "Causes of Success and Failure in the Extraction of Gold," has borne no fruit. The suggested formation of a Gold Institute on the plan of the Iron and Steel Institute has not developed into shape, and washing for gold proceeds on the same lines without prospect of improvement or change. Mr. Lock has done good service in bringing under notice the numerous processes appertaining to the system, consisting as described by him of—1, the stamping; 2, the appliances for separating the free gold and pyrites from the matrix; 3, the amalgamation of the free gold by mercury; 4, the treatment of the blanket sands by barrel amalgamation; 5, treatment of the tailings by means of settling-boxes; 6, classification of the grains according to size; and, 7, treatment of the sized grains on buddles. The catalogue of itself shows that the extraction of gold is far from being a simple affair, and the complications that attend it are prominently obvious when the sub-divisions of the several processes are brought under view. For instance, under the second head, appliances for separating the free gold and pyrites from the matrix, we find—1, catching the free gold by placing mercury in the coifers of the stamps; 2, on amalgamated copper plates; 3, similar amalgamated plates outside the batteries; 4, propelling the stamped mineral grains by a water current down inclined planes across mercury riffles and mercury troughs; 5, the further propulsion of the same along blankets; 6, washing the blankets to collect the gold and pyrites arrested in the further onward progress of the residues—an operation requiring experienced and skilled hands. To set out all the sub-divisions would occupy more space than convenient, and reference must, consequently, be given for the remainder to Mr. Lock's paper already mentioned, and to the discussions thereon. In the absence of opportunity to refer to the record the foregoing extracts will be sufficient evidence of the complexity of the system, and of the disadvantages attending so many consecutive stages of progress to reach the last, when the tailings are abandoned, still containing, according to Mr. Lock, one-third to one-fourth of the assay value of the ores.

In all the stages two elementary means predominate—water and mercury. Mercury is asserted to have proved an imperfect agent for catching the free gold by amalgamation, because when pyrites or other sulphides or arsenides are present in association the mercury sickens—froths up—causing loss of both mercury and gold. Water, the other agent employed, is left out of the discussion. No attention appears to have been directed to a proposition of Mr. Lock's to consider "how far dry crushing might prove superior to wet crushing," nor to his description of a machine called Walworth's aspirator, for separation by gravitation in air instead of in water. The work of separation according to specific gravity is, however, only a part of the duties which water is called upon to perform under the present system of collecting gold and pyrites by sluicing or streaming. Its more important office is that of a motive power to propel by its weight or momentum the stamped mineral out of the coifers through the screens, down the inclined planes, past the mercury riffles and troughs, and the blankets.

The quantity of water supplied to the stamps in Victoria is given in Mr. Lock's paper as varying from 30 to 1200 gallons per stamp-head per hour, though 300 to 500 may be reckoned as satisfying all requirements; and that in America about 93 gallons per stamp-head is generally thought sufficient. The duty of the stamps or the quantity of ore crushed per 24 hours is given as varying in Victoria from 1 ton to 3 tons 13 cwt.; and in America as varying from 1 ton to as high as 3 tons per 24 hours. The Victoria statistics vary to such a degree as to be worthless for the purpose of ascertaining with any approximation to accuracy the number of tons of water used in propelling 1 ton of stamped mineral from the stamps to its final destination. The allowance of 93 gallons per hour for the American stamps is much less than the actual consumption. The able and accurate reports of Prof. Raymond to the Government at Washington, printed annually by order of Congress, are reliable. The Californian stamp-mills use, on the average, 0.5 cubic feet per minute for each stamp; each stamp crushes 2 tons in 24 hours; the cubic foot of water is 6.25 lbs.; and from these established data it works out that 20 tons of water is required to propel 1 ton of mineral through the distance it has to travel, propelling at the rate of 1 ton in 12 hours. Extending the calculation a 30-head stamp-mill, crushing 60 tons in 24 hours, will consume 1200 tons of water. The buddles consume half as much more, and a further additional supply is required for the tailings.

A defect incidental to water as a medium for separating grains differing in specific gravity is that its effective power diminishes in proportion as the fineness of the grains increases, until at last it becomes a medium of adhesion, instead of a medium of separation. Dry clay by means of water is solidified into bricks. Street dust, which is freely moved to and fro by a passing breeze, when wetted by a shower of rain or a watering-cart, is brought into a pasty consistency, the grains ceasing to be individualised, but bound together by the adhesive properties of water. To counteract this remarkable solidifying propensity has been the great difficulty encountered by the scientific ore-dressers with which Germany abounds in the case of mineral grains of the fineness to which gold ores are reduced by stamping. Several mechanical inventions to that end have from time to time been brought into use, called percussion tables, their device consisting of intermittent shocks, whereby the grains spread thereon, intermixed with water, are momentarily set in motion, and during the same brief space of time adhesion interrupted.

There are two systems in use for the separation of minerals, differing in specific gravity. The horizontal system, in which a stream of water carries the grains forward along a plane surface; and the vertical system, in which a layer of grains spread on a perforated bed is caused to rise and fall intermittently by piston strokes operating on the water in a chest underneath. The horizontal system, the origin of which is lost, dating far back into the remotest antiquity, has been within a comparatively recent period to a great extent superseded by the vertical system, which originated in Cornwall. The earliest shape it took was that of a layer of grains spread on a sieve, plunged intermittently into a tub of water, separation according to specific gravity taking place during the immersion of the sieve. This method received the name of jiggling, and in process of time hand-jiggling developed into mechanical jiggling, and the machines received the name of jiggers. To the Germans, who termed this the English system of separation, belongs the merit of developing the jigger to the degree of perfection it has now attained, and of having proved by mathematical calculations, confirmed by experiment, its superior effectiveness as a machine for separation according to specific gravity; but the limit of its efficiency is fixed by the fineness of the grains, and when this limit is reached the horizontal system has again to be resorted to, because the fine grains packed together settle down on the sieve bed in a compact mass, and are not individually free to move. The laws which govern both systems have been investigated and laid down with admirable industry and accuracy by a succession of eminent men, foremost amongst whom stand the names of Pernolet, Von Sparre, Vondeum Borne, Rittinger, and Althaus—and the result of their labours is given to the effect that grains which are too fine to be dressed on jiggers require a preliminary sizing before subsequent treatment on inclined planes. Valid reasons may be given why this indispensable preliminary has up to the present time escaped the attention of those concerned in carry-

ing out the extraction of gold and pyrites from the matrix, and much is due to Mr. Lock for his mention of it in his very useful and comprehensive paper.

A good end will have been served if by the insertion of these remarks in the columns of your valuable Journal the numerous directors and shareholders in the many gold mining companies seeking for gold in India and other parts of the globe can be induced by association and action to give vitality to Mr. Lock's well-conceived initiative for an investigation of all the processes applicable thereto. The territory in India in which their mining operations are to be conducted is said to be watered by rivers and streams; but, imperfect agent as water is, it is a question whether it will be found at hand in all seasons at the spot where it is to be used. While on small maps rivers and streams may appear contiguous or adjacent to the reefs they may on a real scale of distances be actually miles away, and in other cases, where not separated by measured distance, the water may be unavailable, because the stream may run through a valley or a precipitous ravine, while the reefs are on a hill summit or a mountain crest. It may result from united action that encouragement may be given to the production of machines which will develop more efficiency than the best at present in use, and within the range of probability, as suggested in Mr. Lock's paper, that machines working with air may be found more effective than such as work with water.—*London, Oct. 17.*

PRACTICAL.

LEAD REPORT.

SIR.—Since our last the market has taken quite a sharp turn downwards, and a lot of lead has changed hands at a fall of from 5s. to 7s. 6d. per ton. The sales reported were at 15l. 5s. for 12-oz. Spanish, 15l. 7s. 6d. for rich, 15l. 5s. 40-oz. silver, and 15l. 3s. 9d. for 300 tons 70-oz. Market quiet.

STOCKS.

Newcastle-on-Tyne, Oct. 20.

VENEZUELIAN GUAYANA.

SIR.—I read with interest a letter in last week's Journal stating that in a short time a railway would be constructed from the seaboard to the rich gold fields of Guayana. Let this be done, and a large addition will be given to the gold production of the world. The auriferous quartz of Guayana is of vast extent, but its richness is contained principally in the sulphides, the free gold lying near the surface, as anyone who reads the exhaustive report upon the Potosi can see, and that as they go deeper the gold combines with pyrites, yielding as much as 40 ozs. of gold to the ton. They cannot extract gold to a profit at the mines when in sulphides, but neither can the miners steal it for any purpose; but granted a railway, and no Tharsis or Rio Tinto would equal the return of bringing this ore for smelting to Europe.

SPANISH MAIN.

Bishopgate-street Within, Oct. 18.

GOLD MINING.

SIR.—I have no doubt, but firmly believe, that most of those who have advanced their money upon the gold mining schemes lately projected will have to regret their misplaced confidence. There has been what people call a rage to invest in gold schemes, because in some instances gold mines have yielded very large profits. The readiness to invest has induced companies to pay enormous premiums for sets which have hitherto proved of little value, and the probability is that after the great outlay involved in foreign mining most of them will be abandoned with heavy losses. I was told two days ago that the consideration paid for one such mine (Potosi) was 250,000l., which my informant regards as little better than a huge mistake. He believed that the richest portions of the gold deposits were taken away before the sale was effected. How far that representation is true I cannot say, but it seems to me almost insane to pay such heavy sums for the good will of gold or any other mines. Persons who have spare cash for investment in mines should lay it out in home mines which they can inspect, and thereby satisfy themselves as to the certainty or probability of fair returns for their outlay.—*Truro, Oct. 17.*

R. SYMONS.

POTOSI GOLD MINE.

SIR.—I deeply regret that my son—my only surviving son—risked his life by accepting an appointment to the management of this mine. The reports concerning the climate were conflicting—some persons alleging that it was tolerably healthy, and others that it was intolerably bad. My son has unhappily found the last description the correct one. The letter from his wife which came on Friday last says that he is "very, very ill." It has been reported, I find, in London that he is dead. I hope that such is not the case. If his life does not fall a sacrifice in the service of the company I will thank God with heartfelt gratitude. In February, 1866, he went to Central America, and remained there (Chontales Mines) two years, and returned with health not much diminished. From that experience I supposed he inferred that he might venture in Venezuela. If he return alive he is not likely to go abroad again. A man of his multitudinous qualifications need not leave his native land. He is a good civil engineer and surveyor, a first-class draughtsman, a geologist, mineralogist, chemist, lithographer, photographer (amateur), and a good reporter on mineral and other properties. He can speak and correspond in the German, French, and, I believe, Spanish languages, and his moral character is unimpeachable.

"A Bondholder," in the Supplement to last week's Journal, refers to my son's report on the Potosi Mine thus—"The report is incomplete, inconsistent, and unquestionably inaccurate." Of course, I know nothing of the mine from observation; but, if my son is spared to return to England, I warrant you that he will be able to show that what he wrote was dictated by his love of truth, for which he has been distinguished from his earliest years. If the report is "incomplete" that might result from his attack by disease.

Truro, Oct. 17.

R. SYMONS.

RICHMOND CONSOLIDATED MINING COMPANY.

SIR.—Your correspondent, "Common Sense," has made a mistake in stating that the receipts at the Richmond Mine have only averaged 700 tons per week since smelting recommenced. I find that the weekly average has been 825 tons, involving a difference between his statement and the actual returns of 40,000l. a year, and as the number of shares is only 54,000 the difference is important. I have carefully compared the receipts at the mine for the corresponding periods of 1880 and 1881, and I find that the produce of the mine itself (leaving out the seven weeks when the furnaces were shut down) has been as large in the latter period as in the former. In the months of July and August, 1880, 2000 tons of ore were purchased from other mines and smelted, and of course swelled the returns, whilst this year no such purchases have been made, and for very good reasons, as the purchased ore last year proved to be of much lower grade than that produced by the Richmond Mine, and as this foreign ore yielded but a small profit the directors gave up purchasing on a large scale, and confined their attention to the immense stores available in their own mine, and in this they exercised a wise discretion, as down to the seventh level, in the words of an eye witness, the mine was one mass of ore, which is not likely to be exhausted in this generation, the recent discoveries in the Eureka tunnel having proved as an undoubted fact that in these Nevada mines the most valuable deposits exist in the lowest depths. When the limestone belt has been struck in the Richmond Mine at the depth corresponding with that of the Eureka Tunnel there can be little doubt of similar deposits being found there, as the belt no doubt runs through Prospect Mountain and Ruby Hill; and if the estimate of value made by your correspondent at Eureka be correct neither 15l. nor 50l. will half represent the value of Richmond shares. Being in correspondence with a friend at Eureka who is well informed on the subject, I do not speak without authority when I say that the retirement of Mr. Reuben Rickard from the mine which he has so ably managed has not arisen from any doubt of its future productiveness but solely from considerations having reference to his own private affairs. Should the reported appointment of Mr. Harrub be confirmed the proprietors of Richmond shares may rest assured that their interests will be in the hands of a man of experience, energy, and honesty. The writer of the letter which I have endeavoured to answer has

shown no "Common Sense" except in his signature, or he would not speak of the probability of water being more likely to be found than ore in a mine which is on a hill, and which has consequently never suffered from the floods which have been so destructive to other property in Eureka.

NEVADA.

THE CROWN LANDS COMMISSIONERS.

SIR.—Now that agricultural landlords have so handsomely met the necessities of their tenants in the depressed state of their profession I think that mineral tenants should be no less liberally dealt with. I understand that H.R.H. the Prince of Wales has proved himself a liberal landlord, and when times were not so bad as they are now he met the necessities of his tenants in a liberal spirit. Why should not the Crown Lands Commissioners be asked to do the same? I have read many letters addressed to the Journal on this subject; but now that prices are so low it is impossible to pay rent from the winnings of many Crown mines, and in several cases that I know where extensive works have been done the Crown have had their rents and royalties when the tenants have had to find them from their own pockets, not from the mines, and that for year after year. I hope we shall soon see an improvement in mining; but it will take many good years to make up for what many have spent not only in Crown lands but on private estates, where there is as much need for liberality. I consider that no royalty should be above 5 per cent., and that no clause in the Crown leases should be left unrescinded claiming one-fourth of the profits of a mine on the sale of it. Should there not be a respectful approach made to the Crown Commissioners on this subject, and the tilling facts laid before them, and pressed on them?

MINER.

THE ROCK-DRILL COMPETITION AT THE CARDIFF EXHIBITION.

SIR.—Will you allow us to make the following observations with reference to Mr. Vivian's letter published in last week's Journal:—The diameter of holes at the upper ends are as stated in our letter published in the same Journal—namely, ours 1 7-16 in., and Eclipse 1 1/2 in.; but on measuring the lower ends with a pair of callipers we find them both to be a little over 1 5-16 diameter, showing therefore that the drills were smaller in diameter as the holes progressed, and that our drill was not tempered quite so hard as the Eclipse drill. The diameter of holes bored also is generally 1-16 in. to 1/4 in. larger than the bit, due to the point of the bit being usually slightly eccentric to the centre of motion, so that as it revolves the diameter of the hole is larger than the bit by twice the amount of its eccentricity.—*London, Oct. 19.*

A. NORMANDY, STILWELL, AND CO.

THE PREVENTION OF STEAM BOILER EXPLOSIONS.

SIR.—By invitation I, along with a large body of scientific and other gentlemen, went to the Alexandra Palace last Saturday to see a new invention in the form of a self-acting sentinel steam whistle, patented by Mr. Geo. Wilson, of Manchester, and brought out under the auspices of a joint-stock company. The experiments were most successful, and I can only hope that the instrument may become very generally known as early as possible. My sole object in asking you to give publicity to this note is the earnest wish to insure the further safety of those with whom I have been so long and so intimately connected, and whose lives—to say nothing of their capital and labour—are largely dependent upon operations conducted by steam power.

The apparatus to which I allude is remarkable alike for simplicity, durability, and certainty of performance, while it has the vast advantage of nearly, if not absolutely, preventing any possibility of the valves being tampered with. It consists of a cylinder, surmounted by a cupola or dome, carrying a steam whistle, and combines within itself a low-water as well as steam-safety alarm. It is easily attachable to any kind of boiler, and may be of any size, though probably the instrument shown to us—one of about (say) 1 ft. high by 6 in. in diameter—would be found, except on very large boilers, to be amply sufficient; and it is said to be equally applicable to marine and locomotive engines. The boiler used for the experiments on Saturday was an upright one of Messrs. Slater's, the new invention being fixed to one of the end-plates on the top. The only other connection beyond this, between the boiler and its new appliance, is by a 1 in. or 3/4 in. spindle or rod, at the bottom of which is a float, resting, when all is right, on the surface of the water. At the upper end of the spindle, which, for better security, is encased in a tube for some little distance down the boiler, is the low-water steam valve; and, to use the words of the description, "If the water in the boiler should, from any cause, fall below the determined minimum low-water line, the float, by descending with it, immediately opens the valve, thus allowing the steam to rise into the dome, and through a channelled perforation to sound the whistle at once and most effectively."

There is a diaphragm separating the upper from the lower part of the machine; and to obtain the like result in case of too much steam pressure, there is at some little distance from the top of the instrument a perforated plug screwed into a tube, by the raising or lowering of which the tension of a strong helical spring is affected, and which may, therefore, be graduated to suit the working pressure of the boiler. Any excess of steam, however slightly above the registered amount, will act upon this spring and cause the opening of another valve (as in some forms of safety valve), thus allowing the steam to escape through the perforated plug, as also through two side channels made for the purpose, into the dome, and thus to sound the whistle. A glance at either the steam or water gauge will at once show the seat of the mischief.

I hope I have not trespassed inordinately upon your space, and I trust that the description I have thus—however imperfectly—endeavoured to convey will give some idea of what has been effected. If by a self-acting instrument which, while doing away with all outside leverage can be hermetically sealed from every external influence, the chances of either ignorantly or maliciously tampering or even playing with the engine or its power, can not merely be lessened but altogether obviated, much will have been done to ensure that safety which is and ought to be of paramount importance and value, not only to the manufacturing population of Great Britain, but to the whole civilised world.

W. ST. J. WHEELHOUSE

Temple, London, Oct. 19.

STORAGE OF ELECTRICITY.

SIR.—Some interest being at present felt in the question of the storage of electricity owing to its possessing a very important bearing upon that of the economic application of electricity for domestic illumination and for minor motor purposes, a brief account of a secondary battery, or as it is more popularly called a Faure's battery, may be of interest to the readers of the *Mining Journal*. An invention recently patented by the society La Force et La Lumière of Paris, consists in the employment in the construction of the said batteries of vessels or receivers made narrow at the lower part and wide at the upper part, the said vessels being filled with a suitable liquid, and superposed in any desired number, and arranged in such a manner that each vessel is immersed to a certain extent in the liquid contained in the vessel next below it. The arrangement is equally applicable to primary voltaic batteries and to secondary batteries. The construction of batteries in the form of a column presents important advantages, especially in respect of the diminished horizontal surface occupied, the simplicity of the joints or connections, and the possibility of enabling the same part to perform the three functions of receiver, positive electrode of one element or couple, and negative electrode of the adjacent element or couple, combined with obviating the employment of connecting pieces and obtaining absolute certainty of contact. These advantages, however, are more than counterbalanced by certain serious disadvantages; first, the difficulty of obtaining a proper circulation of the liquids and the confinement of gases generated in the battery; second, in the case of elements with two liquids the inequality of the pressure which each diaphragm has to bear upon its two sides, which inequality tends to distort this part of the apparatus when made of pliable material, and thereby change the relative capacity of the compartments. By means of the present invention these disadvantages are obviated, and at the same

time all the advantages of construction in the form of a column are retained by the employment of the arrangement which will be presently described. This improved battery in the form of a column is constructed with deep and taper or flaring receivers, the latter being either of a conical form or presenting the form of a pyramid, or being constructed in the form of a cone having a curved or hemispherical apex, or in any other suitable taper form.

The forms employed simply require to be such that a number of vessels of the shape described may be capable of being inserted to a considerable depth one within the other, and that the sides of these vessels may present a considerably larger area of surface than their bottoms. In constructing a battery with three elements, for example, the lower vessel is supported by a suitable base or stand, and an inert mass is plunged into the upper vessel in order to reduce the internal capacity of this vessel to the capacity of the lower vessels. This arrangement allows the gases to escape readily and facilitates the circulation of the liquids. When elements with two liquids are used porous vessels may be employed, having a form similar to the quasi-prismatic vessels employed by Reynier, the shape of such vessels being suitably modified in order to obtain the requisite tapering or flaring appearance. Porous vessels made from a disc of felt moulded or pressed in the form of bags such as are used for filtering purposes may also be employed in carrying out this invention.

The improved receivers may also be utilised as double electrodes by making them of two metals, one metal being arranged on the outside and the other metal on the inner side of the vessel. When also it is desired to obtain elements having two similar electrodes, such as are employed in the secondary batteries constructed by Gaston Planté, the battery is constructed simply with a series of vessels of a conical form arranged one above the other and separated by suitable filling pieces of conducting material. Each intermediate vessel (constructed of lead, for example) forming the positive electrode of one element and the negative electrode of the adjacent element, with the exception of the polar electrodes, the lower vessel which is in contact with the liquid on its interior only, and the upper vessel which is in contact with the liquid on its external surface only.

Paris, Oct. 15.

LA CLAUQUE.

ANTIMONY MINING IN NORTH CORNWALL.

SIR,—I have not been on the mines since last week; I had word from them yesterday that everything was going on satisfactorily. I am expecting a captain every day to inspect the property for us, when his report will, no doubt, be sent with mine next week. I had a letter from a gentleman from town to-day, and he had called at your office and saw the samples that I sent up, and he is very much pleased with them. I have written him by this post on the matter.

Wadebridge, Oct. 20.

W. PAYNTER, JUN.

THE CALLINGTON DISTRICT—MINERAL VEINS.

SIR,—The mineral veins which traverse some mining districts have proved not only profitable to the discoverers but to a large number of people who have been fortunate enough to be connected with the development of them, proving that there are characteristics peculiar to mineral producing veins, and these when taken as a guide are as a rule attended with success.

Certain minerals exist in certain strata and in veins or lodes of a definite strike or direction is a well-known fact to all mining men, and is proved by the numerous mines that are at present producing minerals in different localities. That every locality has its own peculiarities, and experience obtained in one district will not always serve as a guide for forming an opinion of a mineral producing lode in another, is well known to those whose experience has extended to a great number of localities and districts.

Tin (or mineralogically "cassiterite") exists in granite, and also in clay-slate or killas, and is from both these country rocks being extracted; therefore experience gained in a district in which granite predominates as the country rock will be different from that obtained in a district whose geological features are different. Whatever be the mineral the same facts refer to them in the same ratio; the importance, therefore, of obtaining information for intended investments in mining properties will at once be apparent, and great are the mineral resources yet undeveloped awaiting attention.

Callington, Oct. 20.

J. H. H.

THE CALLINGTON DISTRICT, AND ITS MINES.

SIR,—It is a gratification to see the mines progressing so satisfactorily. The Trebartha Lamern is looking exceedingly well for the present depth; lode now 3½ ft. wide, all saving work for the stamps, and as they have such an abundant supply of water for every purpose it is a very easy mine for cost, and I should think by Lady Day they will be able to have a good parcel of tin ready for market, when the shares, I believe, will be three times their present price. Wheal Luskey is also opening up first rate; the lode is 7 ft. wide, with two well-defined walls, producing grey, yellow, and green carbonate of copper, as they will be able to get about 60 fms. of backs from the adit level, with plenty of water for all surface work, which will be to the advantage of the shareholders. Although copper mines have been so depressed of late I believe we have seen its worst time. It is now 21 years since all copper coins were called in, and bronze issued in its place. The copper called in was 27,000 tons, and 7 tons only issued, the surplus 20,000 tons was then sold as old Government stores, and several old vessels sold just the same time. From that time the copper trade has been in a very depressed state, but now I hope we shall see it revive again. The old adage is the tide never goes so far out but what it returns, but 21 years is a long time to be on the ebb. I am very pleased to hear that the Wheal Langford is about to start afresh after so many years laying idle. The new company have a great quantity of work done for them, an engine-shaft sunk 50 fms., engine-house in good repair, a newly-erected winding-engine house, and the shaft recently collared up, and smith's shaft in working order, which is of very great advantage both in time and money. And as the lode known as Wheal Langford lode varies in width from 18 in. to 10 ft., and is composed of flookan, quartz, priar, and carbonate of iron, interspersed with silver-lead and rich silver ores, varying in quality from 20 to 8210 ozs. of fine silver per ton of stuff. The East Cornwall copper lode, which is a north underlier, is sure to form a junction with the former, when good results may reasonably be expected.

Callington, Oct. 19.

J. BUCKINGHAM.

MINING IN NEWLYN.

SIR,—Rapid progress is manifest in East Wheal Rose, where the engine-houses are far advanced, adit cleared, and a variety of other works in hand or completed. When this mine is drained and opened below the old levels, which are supposed to have collapsed, there will be room for a large number of men, who, I suppose, will arrive just as they are required, the want of employment at home having caused their migration or emigration to other districts. The opinions of miners differ concerning the prospects of the mine, some saying that the result will be a non-success, and others that it will be as rich as ever it was. Time will show, if the mine be fairly opened.

In Shepherds Mine the like activity is displayed in the preliminaries for draining it. Some persons think that this is a better speculation than that of East Wheal Rose. In that opinion I do not concur. I question whether the money at command will be found sufficient to set the mine in a fair working condition.

Newlyn United Mines are contiguous at the north to East Wheal Rose, and contain the extension of all the lodes in that mine. The set is large, and the situation so good, and the lodes so promising, as to have induced Mr. Edwards, J.P., Wolverhampton, to pay a large premium for the property, which is now declared to be worth 20,000£. The present work is the driving of an adit to intersect all the lodes, and I have the authority of the agent, Capt. J. Phillips, to state that some highly valuable lodes have been cut about 10 fms. under the surface. The situation of this property, and the character of the lodes, will naturally command the attention of investors. The three mines I have named, if fairly developed, will employ many hundreds of labourers, and be a great benefit to the district, shopkeepers, and others, particularly those in Truro.

It is rumoured that South Cargoll, which stands at the southern extremity of East Wheal Rose, is to be re-worked. It was worked

at a loss by Messrs. Michell and Co. for several years, and if worked again it is probable similar results will follow. I do not suppose that lead ore has grown since they abandoned it, and the price is lower than it was during their time of operation.

Truro, Oct. 19.

R. SYMONS.

THE COST-BOOK SYSTEM.

SIR,—Those persons who advocate the Cost-book System in mining do not appear to be sensible of the injustice and misery in many instances resulting therefrom. I will subjoin an instance of which I was informed to-day. One of the shareholders in Frank Mills Mine, which is being wound-up in the Stannaries Court, took 25 out of 6000 shares, into which the mine was divided, and she is now called upon to pay 40£. per share (1000£.) for the liabilities of defaulting partners. This one instance, out of many which might be adduced, shows the danger of unlimited partnership concerns. It is not to be wondered at that distant shareholders refuse to contribute to the development of mines worked on that system. Clifford Amalgamated and other mines known for account-keeping proclivities of their managers or committees will not soon pass away from my memory. Even resident shareholders cannot be always sure that they may not be made responsible for debts not their own. In rich mines they are safe, but in unproductive mines not so. The case mentioned above should be accepted as a warning against embarking in unlimited partnerships. I have suffered from my connection with them.

Truro, Oct. 17.

R. SYMONS.

SOUTH POLGOOTH MINE.

SIR,—This mine is situated south-west of the Great Polgooth United, and is considered by the miners of the district the best mine in it. About eight months ago the rotary pumping and stamping engine was brought on the ground. In that short space of time the engine-house has been erected, the engine placed in it, and all the shaft work placed in position, shaft cut down, and all the dressing appliances prepared for the manipulation of the reduced tinstone. All these works, under the management of Capt. Thomas Parkyn, have been accomplished at a moderate expenditure, and the returns are already more than sufficient to cover the working expenses. On Saturday last several tons of tin ore were sold at 62½. 7s. 6d. per ton to Messrs. Daubuz and Co., Truro.

Truro, Oct. 19.

R. SYMONS.

MINERAL COURT MINE.

SIR,—The good discovery made here is maintained. The lode is from 8 to 10 ft. wide. Capt. Poad inspected the mine on Monday, and he says that the lode is splendidly rich, and that the lode called the "Golden Cow" was worked on tribute many years at 2s. 6d. in the 12, and the men earned good wages. There are several other lodes in the sett, which is one of the largest in Cornwall.

NEW FOWEY CONSOLS.

The working of this mine has been resumed under the management of Capt. Pascoe. This mine of itself is too limited; but if the company will take in connection with it the ground at the east belonging to Messrs. Cook, Grigg, Bear, and Rundle, the whole together will form a good large sett, but without these lands the sett is too small for extensive operations.

R. SYMONS.

TIN HILL MINING COMPANY.

SIR,—In reply to your correspondent in last week's Journal I feel pleasure in endorsing the truth of his statement. I have been a shareholder from the commencement and have twice visited the mine—first in November last, and secondly in July this year, when the engine and stamps were started, and I was astonished at the work done, the number of lodes opened, and the quantity of tinstuff raised on the surface. Three weeks since the dressing machinery was started, and I understand from good authority that a parcel of tin will be sold by the end of next month and be continued afterwards, so the shareholders may really congratulate themselves on the prospect of early profits.—London, Oct. 20.

X. Y. Z.

SHROPSHIRE LEAD MINES.

SIR,—The Old Snailbench has not only continued rich from surface to a depth of 250 fms., but their workings are sure to be nearly a mile in length. Their present manager, who is a thorough business man and full of energy, is having engine boilers, air compressors, &c., fixed with the intention of putting out a cross-cut northwards to intersect and prove the east and west lodes already discovered at surface in that direction, and we all wish him great success. I remember when he took in hand the making of the tramway from the London and North-Western and Great Western line near Pontesbury to the mine, some parties who knew him better than we did, when we enumerated the difficulties that were in the way, told us that if he took it fairly in hand he would be sure to pull it through, and so he did, and it is a great boon to all the mines up that side of the mining district. I am told that he wishes to extend the said line up to the other mines, and we hope Capt. Waters and his friends will join in with him, and that we shall see that accomplished soon.

A SHROPSHIRE MINER.

MINING IN SOUTH WALES.

SIR,—In reference to the letter of "Looker On," in last week's Mining Journal, the one "Campbell" who was enabled should have been "Earl Cawdor," whose family have been the possessors of the Nant-y-Mwyn Mine over 250 years. We recollect in 1854, when Mr. Gibson erected a steam-engine, and under his Cornish Captain Gribble placed that mine in a valuable position, where it worked and sent hundreds of tons of rich silver-lead to Llanelli, which was purchased by Messrs. Nevill, Druce, and Co., who declared it equal to the Nant-y-Mwyn produce. After 12 years it collapsed in the failure of Messrs. Overend and Gurney, in 1866. Steam-engines and all appliances were sacrificed, and why we were at a loss to conjecture. It is now in the hands of the same gentleman, when we are perfectly certain it will become one of the busiest scenes, and no doubt paying mine, in South Wales.

Llandorey, Oct. 18.

LEAD MINING IN LLANARMON.

SIR,—Since my last communication to you on the above subject in this locality many important changes have taken place, which I cannot help thinking are the result of the correspondence which has been going on in the Journal more or less for the last two or three years. They have not come about in the way which I have advocated exactly, but I am pleased to see the district is being now brought prominently forward practically as one in which lead mining may be prosecuted with every prospect of success.

From the Journal I have gathered during the last few weeks that two new companies have been registered, with each a reasonable amount of capital—one, the Great New Westminster Company, with 40,000£., and another, the West Minera Mining Company, with a capital of 30,000£., and from my sources of information I am given to understand both these companies are to be worked vigorously. I have it also on the most reliable authority that one or two more valuable properties are being arranged to be brought into the market as limited companies under the able management as agents of Messrs. Absalom Francis, of Wrexham, and William Francis, of Northop, Flintshire. The latter gentleman I know has already the management of one or two valuable properties in this locality. One of them is in private hands, and likely to turn out a good undertaking at a comparatively small outlay. The other is the valuable property situate at Nant-y-Palme in Llanarmon, and known as the Lady Ann Silver Lead Mining Company (Limited), with a nominal capital of only 15,000£., which by competent authority is considered ample to do all that the company requires to make it a profitable undertaking; and to this end the reports are of a most encouraging character. I may here say that I have three reports upon this property this week. One, I am pleased to say, is quite voluntary and unexpected, but equally reliable as the other two. I cannot give the reports in *extenso*, but if you will kindly allow me I will give your readers the substance. The point of observation is in the 30

yards level, Westminster lode, driving east (towards a portion of the property of the West Minera Company which immediately adjoins the Lady Ann property), in which lode the men are now in upwards of 78 ft. All the reports agree that the vein is widening, and is now upwards of 2 ft. of most congenial vein matrix, with lead in the middle and in the hanging, and also in the roof; and the latest information is that the driving is going on as usual, "and the leading of lead ore is still going on, and looking very promising." It is now considered a certainty by competent authority, from all that can be seen, that this company (the Lady Ann) will ultimately prove a successful undertaking. One correspondent writes:—"I hear that a great company is being organised to work the Old Westminster Mines. If so, you must certainly stand a good chance of a big bid for your property, or else a proposition to carry their level through it on advantages terms to you." At present I must conclude.

A SHAREHOLDER IN THE LADY ANN SILVER-LEAD MINING COMPANY.

Oct. 20.

WHEAL JANE TIN MINE.

SIR,—The tin sold last week for "three" weeks realised 5427. 16s. 10d. This with the September sale for "four" weeks (556£.) equals 10987. 16s. 10d. They expect to sell 14 tons for the coming four weeks, which will give a good profit. Sales will gradually increase, and there is every prospect of the shareholders receiving a dividend in July 1882. Shares have been in great demand this week; now difficult to obtain at 25s. to 27s. 6d. per share—a rise of 7s. 6d. per share in a week. They have some splendid stones of tin in the 60 cross-cut north, and every point of the mine looking well, with many important points yet to open up. If shares rose to 37. each (my belief is they will do so) it would only be 36,000£. for the mine. Compare this with other tin mines by multiplying the price with the number of shares, and thus ascertaining the market value of the property. I have lately bought shares from 10s. up to 25s., because I believe in the stability and soundness of the mine. I am watching another cheap share (Wheal Jewell), worth picking up at 12s. 6d., for as good a rise as Wheal Jane has had.

London, Oct. 21.

INVESTIGATOR.

WHEAL JANE.

SIR,—I shall undoubtedly, so long as I live, watch the progress and results of this mine, and at the same time take the liberty to point out to the pursuer any little error that "one of the committee" might make, which probably at the moment may have escaped the notice of the pursuer in his numerous engagements—"the machinery is worth 15,000£." Now, the pursuer having had a great deal of experience in the purchase of machinery should certainly be the most competent judge as to its value, and I would, therefore, ask the noble defender a straightforward question for the guidance of innocent shareholders—Is the machinery worth half so much as he represents? I ask for information; and if I am again impudent (as our public benefactor terms it) I will beg pardon. What must Wheal Jane shareholders expect in 1882—continuous calls, or enter the Dividend List; 1881 is fast drawing to a close, and the gratuitous advice, so liberally given, has not as yet been realised. At the present price of tin what profits must the present shareholders expect in raising 10 tons per month?

West Chiverton, Oct. 20.

RICHARD SOUTHEY.

KILLIFRETH MINE.

SIR,—As a distant shareholder in the above mine it would be very pleasing to me, and I have no doubt to a great many others similarly situated, if regular reports of the mine were sent to your valuable Journal weekly or fortnightly, so that we might be able to know how the mine was progressing. Some time since a good lode was reported to be discovered, which, according to the agent's report, was valued at 60£. per fathom, and by some others much more, and shares rose from nothing up to 2½. I well remember when the discovery was made at East Caradon Mine of a lode about this value, and certainly of no greater prospective value, shares rose from 5s. up to 40£., and the mine divided into the same number of shares. History sometimes repeats itself. Time will tell. If the lode at Killifreth continues to improve, as I hear it does, it would be no great prediction to say that our property will be worth ten times its present value in less than six months. I trust the agents will take the above hint, and let us see a report a little oftener.

A DISTANT SHAREHOLDER.

SOUTH DOLCOATH MINE—FORMATION OF A NEW COMPANY.

As was intimated in the Journal a few weeks since, measures have lately been in progress for recommencing work on this property, and we have now further to report that a meeting of those who desire to hold an interest in it took place on Tuesday, at 110, Cannon-street, for the purpose of consolidating themselves into a corporate body.

Colonel Barnard being voted to the chair, called upon Mr. Lambert to state to those assembled all that he had learned respecting the mine, whereupon Mr. Lambert said that he had ascertained it had been profitably worked for several years up to the great period of depression that fell upon the mines in 1876, when the company then in possession mortgaged their property, and being subsequently unable to redeem it determined on dissolution, and became extinct. From that time, excepting a vigilant care of the machinery exercised by the agent of the mortgagee, all operations have been suspended. The former workers, however, well opened out the mine to a depth of 80 fms., with six levels of considerable extent, three of which, according to Capt. Wm. Pascoe's statement, have yielded about 3000£. worth of copper ore, and have sufficient left in them to provide for regular and continuous sales for a long period to come. Judging from the depths to which the adjacent mines have been developed and proved so richly productive, South Dolcoath now lies with its eight known valuable lodes and two great intersecting cross-roads readily accessible to any enterprising adventurers whose discernment and energy may prompt them to pursue the work so well begun; and, considering the fact that the price of tin now stands at a higher point than it has done for many years past, and that there is every reasonable prospect of a further advance owing to a rapid increase in the demand, both at home and in the United States, as well as a great falling off in the supply from foreign markets, it may fairly be asked what time for doing this could be more opportune than the present? Looking at the plan of the mine, it is seen that there are five shafts besides the engine-shaft, above which is erected a powerful Cornish pumping-engine, and there are, in addition, three horse-whims, a capstan, a water-wheel, a small battery of stamps, a dressing-floor, carpenters' and blacksmiths' shops, with their necessary fittings, an account house, a pitman's house, and various sheds.

Mr. Lambert further said that upon representing these facts to a few of his personal friends, and showing them that the mine, as it is laid down by the Government survey, is situated in the very centre of a group of mines that are justly celebrated as the best dividend-paying properties of Cornwall—Carn Brea, Dolcoath, South Condurow, South Wheal Frances, Tincroft, and West Basset, which closely surround it, in actual contiguity with it, so that the same lodes are being worked in more than one of them simultaneously, it was promptly determined to purchase the mortgagee's interest in it, and to reopen the workings. This resolve was at once acted upon, and an agreement for the purchase was duly executed on Sept. 24, and within the following week he had again spent several hours upon the mine, in conjunction with Capt. John Nicholls, of Camborne, and Messrs. Bryant and Tonkin, of Truro, who, being present at the meeting, would personally state the result of their investigations. For some time it was a matter of grave consideration and discussion whether operations should be commenced under the Companies Acts or under the Cost-Book System, and taking note that all its prosperous neighbours have adopted the latter, and that such a course would be attended with far less expense than registration as a limited company, it was determined that South Dolcoath should also be worked as a Cost-book mine.

Having read a report upon the property made in 1876 by Capt. William Pascoe, of Camborne, who had also given it as his opinion

Meetings of Public Companies.

YUBA RIVER GOLD WASHING COMPANY.

The first ordinary general meeting of shareholders was held at the offices, Dashwood House, New Broad-street, on Tuesday, Mr. J. IRVING COURTENAY in the chair.

Mr. W. J. LAVINGTON (the secretary) read the notice convening the meeting.

The CHAIRMAN said. Gentlemen, at the statutory meeting of the company there is not usually much to report, but on the present occasion I have some remarks to make and some facts to lay before you that will be of interest. You are aware that this is the first meeting of the company, and that it was formed to embrace and carry on the business of two other companies, shortly called the Blue Tent and Fall Creek Companies, which have been in existence for several years. You will be of opinion that the amalgamation was judicious, and that the new company has a most valuable and complete property, of proved richness, and in a condition to profit by the large expenditure of money and time by the old companies, and that speedy profitable results may now be looked for with the utmost confidence. We possess 500 acres of the richest auriferous ground in the world, of an average thickness of 400 ft., so that it may be deemed to be practically inexhaustible, and an extensive system of canals, lakes, and reservoirs, the largest canal or aqueduct being 31 miles in length. People are surprised to hear that the property has already produced 124,000 oz. in gold, and that one of its mines, called the South Yuba, yielded a profit of 35,000 oz. in the process of development. We have timber land, and saw mills, and all the necessary appliances for gold washing and mining on a large scale, and the whole of these several properties, mines, and water rights were acquired by this company on very favourable and easy terms, as settled by the shareholders of the old companies in general meetings.

I shall bring to your notice a novel and important feature in this property, and one to which your directors and their skilled advisers in California have given the most careful and careful consideration, as it is, I think, a result, the result of belief, in introducing a kind of mining as yet quite unknown in mining circles in this city, certainly as far as regards any mines quoted on this market. But first let me say that an important part of our programme has been accomplished. The large tunnel, which has been in course of construction for the last two years, has been completed to the South Yuba Mine, and judging from the rate of progress made by those valuable allies of the miner—the machine drills—the upraise to the rich gravel, some 130 ft. in height, will be finished in two or three weeks. This tunnel is driven in solid rock for over a distance of 1000 ft., and through it the rich bottom gravel will be washed off, of which our agent states there is now actually uncovered some 550,000 (10,000) worth waiting to be removed, the old company having been unable to reach it owing to the want of this tunnel. This alone we think should yield a good profit at once. A very remarkable proof of the exceeding richness of the gravel or auriferous alluvium was afforded last month. A company of Chinese miners gave us \$5500 (1000) for the right to pick over a portion of the surface rock, which had already been washed tolerably clean by the old company, but upon which some gravel necessarily remained by reason of the undulations and crevices in the rocky bed upon which the alluvium rests. As Chinamen generally know what they are about, and where dollars are covered, no more strain of proof of the gold contents and value of our mines could be given. This portion of the property is well shown in the photograph before you, which is one of a series of eight views of the Yuba Company's property, forming part of the gallery of Mr. Watkins, the well-known photographer of California. It is intended to continue the tunnel to another mine called the Enterprise, which has also produced a large amount of bullion, so as to work both mines together. As the tunnel progresses towards this point a number of upraises will be made to the rich gravel above, and this brings me to the subject of working the property as drift mines, on which system a very large number of mines are worked in California with profitable results. By drift mining is understood that process by which only some 5 or 6 ft. of the rich gravel lying directly on the bed-rock is removed. This is done by driving levels and cross-cuts on the bed-rock, just as they mine for coal in this country, the upper stratum being supported on timbers. Thus about every 100 ft. or so as the tunnel is extended under the channel where the rich gravel is—the width of this channel varies from 250 to 350 ft.—an upraise is made into the gravel, and a drift is driven directly across the channel. Another 100 ft. further on the operation is repeated, and then the block of gravel between these upraises is blasted out, precisely as you work a coal seam. It is afterwards washed in the usual way, and the gold is caught in the hydraulic sluice boxes. This system of drifting has several advantages over that hitherto in use—the hydraulic—as by it the gravel containing less gold is left untouched, and especially in a mine like ours where the banks are so lofty, and the mass of poorer gravel that has to be moved so vast, by adopting the drifting process a considerable saving in powder, labour, and water-power will be effected. Our representative in California, Mr. Thomas Price, of San Francisco, who in the course of the last 18 years has made himself acquainted with the merits and value of all the prominent mines in California, and who has made a special study of this property for several years past, has lately, in conjunction with our resident superintendent, Mr. G. S. Powers, and one of our directors, Mr. J. E. Rowe, now in California, been engaged in considering the best method of working our mines as drift mines. They are of opinion that there is no doubt as to the profitable results that can be speedily earned, because of the thoroughly proved richness of the alluvium and the special facilities the mines possess for this mode of working. (Hear, hear.) The company owns more than one mile on the channel of rich auriferous ground in the very heart of the main gold belt, which produces the bulk of the gold now raised in California, and having watched the bullion returns as far as could be ascertained of the leading gold mines in the State, I consider that the gravel, of which we possess such a vast quantity, is second to none in its yield of gold. Taking then as a basis the past bullion yield, the proved richness of the gravel, and bearing in mind what other drift mines upon this well known auriferous channel have done, the question is what is the value of our property and what profits will it yield, considered for the present as a drift mine only. We have not less than 10,000 ft. of the rich gold-bearing gravel within our boundaries, and the width of this rich channel is from 250 to 300 ft. or more. Estimating it at (say) \$500 per running foot the gross amount would be \$5,000,000 or 1,000,000, and taking the working cost at 50 per cent., the net profit would be \$2,500,000, which would be a very large sum, and, as Mr. Price and Mr. Powers say, can be realised readily and rapidly by opening up, as I have before stated, at various points along the line of the tunnel. To give you some idea of the profitable results obtained from drift mines, the Ball Mountain and Empire mines may be mentioned. The former of these from 3300 ft. of gravel has paid to its shareholders \$664,000, while the net earnings of the Empire Mine from some 1560 ft. on the channel are stated to be \$425,735. I have given prominence in my observations to the results to be obtained from working the mines as drift mines, because I think it opens quite a new era for the property, and I see in it the prospect of very large increasing returns. Of course we also intend to work a portion of the property as heretofore by the hydraulic method, but we shall be at the same time quite independent of it. You are acquainted with the latter mode of mining, and I shall not detain you with details. The estimate of profits by Mr. Price from working the mine by the latter method alone, based on the actual yield of gold in past years, are at least 27,000 oz. per annum, against which there are the debenture charges (say), 47000. Which of these two methods of working will give the larger and steadier profits cannot be ascertained with certainty except by actual working throughout a season (I ought to say, some think more clear profit will be earned as drift mines), but it is manifest that the mines will yield large profits by whichever method they may be worked. It will most likely be found quite practicable to work simultaneously by both methods on different portions of the property, in which event the returns, and consequently the profits, would be very largely increased over any estimates heretofore made. You are aware that for several years disputes have arisen between the miners residing in the mining countries and the farmers in the valley countries, because of alleged damage by sediment carried down from the mountains into the valleys. Hitherto the decision of the Courts has been in favour of the miners, and a local farming judge, who gave an *ex parte* decision, has just been declared disqualified by the Supreme Court. Our latest advice as to the effect that an amicable arrangement with the farmers is considered to be most probable, and this will be found to be the best solution of the question for all parties. These disputes have reference only to mines worked on the hydraulic system, as no objection is made to drift or quartz mines. The mines will be ready for washing next month, and for drifting, if thought desirable, a month or six weeks later. There are no resolutions to be proposed or business to be transacted, and I therefore, shall conclude by asking Mr. G. Davis, who lately visited the property, to give the shareholders his impressions of its value. Mr. Davis has been a mining man for the last 40 years, and is lucky enough to be connected with a mine somewhat to the north of our property, and on the same channel, the quartz from which is of marvellous richness, and is now on view in this city. Mr. Davis is not interested in any way in our property, but kindly consented to attend this meeting, as he had been so recently at the mines. (Applause.)

Mr. G. DAVIS: Mr. Chairman and Gentlemen—I have had very great pleasure in complying with your invitation to attend this meeting. When I inspected your property I had not the least idea in the world that I should ever attend such a meeting as this. I was under the impression that I might have met a shareholder or two, and have given my opinion of your property; but as I have come here I have very great pleasure in telling you what I saw there, and what I remarked at the time in regard to your mine. As you, Mr. Chairman, have said I am not in the least interested in your property, but some two of your shareholders were good enough to accompany me to inspect a mine in which I was interested, and not only was I returning the compliment in visiting your mine, but I was going to learn something too, and possibly at some future time I may publish the remarks I made in my note-book on the different mines. I have made myself master of all systems of mining in California, and, of course, I searched out for the modern mines in each department. I was repeatedly told by parties not connected with your mine that Blue Tent was considered, from the magnitude and scale of its operations, and the mode in which you are carrying on things, to be one of the model mines of California, and, therefore, I was much interested in inspecting it. I have nothing in the shape of a report, but possibly it may interest you to hear what I wrote in my note-book in regard to your mine. We got there at 6 o'clock in the evening of Saturday, and my first entry is "6 a.m., to examine Blue Tent Mine; the thickest bed of gravel yet seen anywhere." That is in California, and I had spent four months there, and had been inspecting several hydraulic mines in different places, your mine being the last. I found it very different from any I had seen before, and I did not know till the depth, but I said it was from 100 to 130 feet below the bed, and one of the best driven tunnels I have seen anywhere, and I have for 30 years superintended tunnel driving. "The whole of the property for gravel mining is two miles long by half-a-mile in width—gravel of enormous thickness." I think I should frighten you all if I told you the probable value I put on it. (Laughter.)

Mr. PETER WATSON: Then let us be frightened. (Hear, hear, and laughter.) Mr. G. DAVIS: This is the first time in the City of London or in Great Britain that I have opened my mouth on this subject and telling you what I am telling you now. I say "It probably contains \$100,000,000 worth of gold or 20,000,000 oz. sterling, half of it should be profit." Now I come to something more practical. "There are \$300,000 worth of ore a year to take out, possibly \$150,000 a year profit. That is not very far from the 27,000 oz. the Chairman referred to." Mr. Powers, superintendent, and Chinamen, cleaning bed-rock." Some of you have seen the stuff in California, I have brought some specimens here. Here is some Californian gravel taken wet out of your mine. If you look carefully you will see the specks of gold in it. That is the sort of stuff all this gravel mining and drifting is going on. In addition to that, as I am an old Welsh miner, and know something about washing, I challenged the Chinamen to wash some of the gravel, and here are the results of two pans' washing. (Specimens produced.)

The CHAIRMAN: Would you kindly tell the shareholders about how much a pan holds. Some of them may not know. Mr. DAVIS: The largest pan would hold about twice as much as my hat would. The Chinamen are doing work there that white men would never do, going into the crevices and cleaning up everything. Mr. PETER WATSON: The Blue Tent is apparently the best specimen of the lot. Mr. DAVIS: It is. I think you ought to have the utmost confidence in your property. It is an extraordinary property, and I fully endorse what the Chairman said at the commencement. When he was speaking I felt quite at home in your mine. I had been attending mining meetings for a great many years, but I never heard a more clear and concise address by a chairman in elucidating the true features of a mine than that which your Chairman delivered to-day. (Applause.) It was perfectly clear. I understood everything he referred to, and I believe he stated nothing but facts. (Hear, hear.) It is right to look at the men you have in this mine. A successful mine depends a great deal on a good captain. I know the Cornish adage is that a "good bal makes a good captain," but a bad captain will spoil the best mine in the world. I know that you can place confidence in the abilities of Prof. Price, who is respected in San Francisco as being one of the highest authorities on hydraulic and quartz mining. Then you have Mr. Powers again. I do not know so much about him, but he appeared to be a safe and sound man, who well understood his business, and between Mr. Powers and Prof. Price you will find no difficulty at all. If any man can surmount difficulties those men can do it, and I say that especially of Prof. Price from the knowledge I have had of him for so many years. (Hear, hear.) I do not know that I need say anything more, but if any gentleman would like to ask for any information, or to make any personal enquiries either now or afterwards, I should be very glad to answer them. (Applause.)

The CHAIRMAN: As Mr. Davis is obliged to leave soon I am quite sure I shall meet your views and express your feelings in thanking him for coming here to-day. (Hear, hear.) He was kind enough to call on me a few days ago, and I told him that we were going to hold the statutory meeting of the Yuba River Company, and that I was sure the shareholders would be glad to see him. Of course we know the value of our property, but it is very satisfactory to have thoroughly independent and competent testimony on the subject. (Hear, hear.) I thank Mr. Davis in your name for attending the meeting to-day.

Mr. PETER WATSON: I was asking Mr. Davis as to when it was he was there. That did not come out, and it might have been 12 months ago, or two or three years ago; but he states that he was there on Sept. 6 and 7—only six weeks ago—so that you have the latest information on the prospects of the property. Did you see the tunnel completed?—Mr. DAVIS: Yes.

Mr. WATSON: When this company was reorganised, and amalgamated I investigated the matter and have taken some trouble in investigating as to its prospects; but certainly after what has been stated by the Chairman on the present occasion—and he has laid everything before you in a very clear and explicit manner—and when he has been backed up by Mr. Davis, who has elucidated and confirmed everything that the Chairman had stated with regard to the great value of the property, and when Mr. Davis, who, as I said before, visited the property only six weeks ago, says that if he told us all he believes of the great value of the property he would frighten us. I think there must be something in this property, the really enormous alluvium all I have heard of. (Hear, hear.) Although this company was amalgamated just at the time when things were flat and people were going out of town, at the same time there is no doubt but that we shall have very considerable profits on the capital already subscribed to develop the property. (Hear, hear.) Of course, there is not the slightest doubt about the value of the property. (Hear, hear.) According to the figures we have had laid before us to-day we may expect a profit of \$150,000 per annum, which means 50,000 a year. I think that must be very satisfactory to those who have an interest in the concern, or who may hereafter purchase an interest in it. I would say nothing more except to say that the next 12 months will in all probability show very satisfactory results. I am sure we are very much indebted to Mr. Davis for coming to the meeting and giving us the information he has, and I hope the shareholders will have the pleasure of seeing him again. (Applause.)

The CHAIRMAN: I think we have had a very good illustration of the usefulness of the statutory meeting which the law requires us to call within four months of the incorporation of a company when we are able to have a conference such as this has been, I think we are likely to have highly satisfactory results.

On the motion of Mr. NEAME a vote of thanks was passed to the Chairman, and the meeting then closed.

POTOSI GOLD MINING COMPANY.

An extraordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Friday, the 14th inst., Mr. E. L. J. RIDSDALE (the Chairman of the company) presiding.

Mr. J. BRUCE WILKINSON (the secretary) read the notice convening the meeting.

The CHAIRMAN said that at the meeting held in March last he told the shareholders that such was the great recentness or the time which the board had been in charge of the affairs of the company that he could not tell them much more than they knew. At that time he told them that they had only received one or at most two letters from the mine. At that period Mr. Webster, the manager, had just returned, and he told them that the cause of the low yield of the gold, which was commented on very much at the meeting, was owing to the great deficiency of labour at the mine. This was, however, soon rectified. Time went on, and notwithstanding that the agent at the mine wrote telling them that there would be no difficulty in mining and crushing the 60 tons of ore a day, this was not done, and the board requested that the ore should be crushed at once. When they found that the labour question had been remedied, and the gold returns did not improve, the board requested Mr. Symons, who had been chosen to undertake the office of manager, to make a full report on the property immediately on his arrival, and let them know why they were not getting the amount of quartz that had been expected, and the reason for the yield of the gold falling off—in short, to send them a full report of the position of the company's affairs at the mine. The report sent by Mr. Symons had already been laid before them, and he must say that it was a most unfavourable one. There were certain points connected with it which he hoped the shareholders would discuss thoroughly at the meeting. Upon receipt of the report the board took the earliest opportunity of giving the shareholders notice of it, and calling this meeting to discuss it. He must say that he had not to give an opinion on the matter until the shareholders had given their views on it, for if he gave an unfavourable opinion the vendors might say that he wished to prejudice the meeting against them, while if, on the other hand, he expressed a favourable opinion the shareholders might think that he wished to make things more pleasant for the vendors than the position of affairs would warrant. He would, therefore, ask the shareholders to form their own conclusions, and afterwards he would tell them what his views were. With regard to the state of the property he did not think he could add anything to the information which the shareholders had already received. The last report from the mine was a very full, able, and exhaustive one, and although he thought there were several points discrepancies owing to the illness under which Mr. Symons was labouring, and although he had taken a gloomy view of some parts of the property, especially of the Chile vein, he thought it was an honest expression of the writer's opinion of the property. (Hear, hear.) What he wished to do was to lay before the meeting the financial position of the company. (Applause.) Since the company had been in existence they had crushed 5304 tons of quartz, which had yielded 7425 oz. of gold, and this had produced 28,400, the average being 1410 oz. per ton. They had expended on capital account altogether 75,500, and they had received for the gold to hand and in transit 28,400, and they had received for sundry miscellaneous items 3100, raising the total receipts to 31,500. Deducting that from the 75,500, it would give them 44,000, and that was the amount by which their capital account of 100,000 was at that moment deficient; but it would not be fair to consider that that amount was lost on the working, for the 100,000 was subscribed for the purpose of developing the mines, buying machinery, and in other ways developing the property, and, therefore, he wished to show that of the 44,000, excess of expenditure 22,000 had been spent on capital account. They had spent 10,000 on the acquisition of a portion of the Peru lode, which was the most valuable portion of the property. That was, of course, placed to capital account, as it was represented by a valuable asset. They had spent on machinery for opening out the Peru Mine—a new engine, boiler, trucks, &c.—2500, and on the Chile Mine they had spent 2500, on capital account, including the cost of a new 45-horse power engine and a new boiler sent out to replace the one burnt out. These items, with 4500, spent on Peru lode, left 2300, which was the brokerage paid when the company was formed. It was doubtful whether that should be put to capital account, but it was not lost on the working of the mine, and they had thought it better to place it to capital account temporarily. This would leave a loss on the nine months working of 22,000. Of course, that was a state of things which they certainly did not contemplate when they first took over the property. They believed they had a good going concern, and that they would be able to make very good dividends out of it; but almost as soon as they took the concern in hand the gold began to decline, and unfortunately in about the month of April they got a large accession of sulphides. When sulphides occurred in a gold quartz mine it was impossible to get the gold out by the process of amalgamation, and they must be put aside and treated in another way. Mr. Symons estimated that the sulphides at ½ per cent., or about 5 tons in the month's working on 1000 tons crushed, and the sulphides average about 41 oz. to the ton. They could not treat the sulphides at the mine, nor did he think it advisable that they should if they could, for the operation was an excessively expensive one to conduct, and besides required a man who thoroughly understood the process to give his whole attention to it. The plan adopted had been to bag the sulphides and send them home to this country, which would cost about 300 per ton. On the assay value of 40 oz. to the ton, that would give them about 8000 a month, but they could not calculate that as profit, as they would have to pay the expenses of the carriage home, and they would only get 85 per cent. of the assay value, but they would, he thought, get about 5000 from that source. Mr. Symons was now on his way home. They had had great sickness at the mines. Almost every officer at the mines had been incapacitated, and the auditors had not yet got the June accounts completely in order, though the July accounts were in, but the figures which he had given them might be taken as approximately correct. The real point was that the gold had fallen off. If they had had the 3 oz. to the ton they were led to expect instead of 28,400, they would have got about 16,000 oz.—=64,000, which would have covered the 22,000 of loss, and left a profit. Mr. Symons, in his report, said

that the mine could be made to pay working expenses as soon as it is forked. Mr. Lambert drew attention to the fact that the five mines immediately contiguous to South Dolcoath have paid in dividends more than six times the amount subscribed for shares, and concluded his remarks by expressing his belief and hope that the property now acquired will very shortly be in a position to take equal rank among its celebrated neighbours as a dividend-paying mine with every prospect of proving literally, even as they have been, a mine of wealth to its fortunate proprietors.

Capt. Nicholls then stated that he had been over the property in question many times during the past few weeks, and had collected valuable data respecting the lodes traversing the sett upon which he had based his report.

Messrs. Bryant and Tonkin also stated that they had, on more than one occasion, accompanied Capt. Nicholls, as well as having made several independent visits to the mine, and that they entirely concurred with the report just read to the meeting.

The ordinary rules of a Cost-book mine were then read over and adopted, and the adventurers present signed the book in confirmation of various resolutions that were passed, the most important of which being the appointment of Capt. Nicholls as manager.

Upon the invitation of the Chairman the shareholders then partook of luncheon together, and finally separated, well-pleased with the prospects presented by their venture.

WEST FRONTINO AND BOLIVIA GOLD MINING COMPANY.

Mr. W. J. Goyen, in a report dated Musinga Grande Mine, United States of Colombia, Aug. 8, says:—In handing you a detailed report, to be presented at your first general meeting of shareholders, I beg to congratulate you, not only on the progress made in developing the mine, but on the fact that the richness and stability of the mine is by the advance of the several levels on each lode, now fully established. Variations in the character and width of the lodes naturally occur in all, and particularly in gold mines; and this we have met with here, although to a much less extent than is generally seen in this country. As, however, such a large extent of ground is laid open, and the lodes in no place are without a good sample of gold, a large supply of mineral can be relied on; the lodes also continue to improve in quality and are more uniform in size as we advance into the mountain; we may, therefore, rely on being able to increase our reserves of mineral greatly beyond the supply which will be required to sustain the new mills as they are being erected.

Our works up to the present time have been confined to the western side of the Musinga Valley, as being the place where the lodes were first discovered and worked on, but our resources have not permitted us to extend them, neither do I think it prudent to do so until the mine is thoroughly established. I wish, however, to inform you that the same facilities exist for opening on the different lodes on the eastern side, and the height of the mountain is more or less the same. The mountain rises nearly perpendicular, so that slopes would be laid open much faster even than on the western side, and the country rock being the same I see no reason to doubt that equal richness will be found there. As yet the lodes have not been seen or even searched for between this and the Frontino Mines. No doubt considerable disappointment has been felt owing to the old six-head mill having resulted in such a bad state as to be unable to give immediate returns of gold, and the delay in the completion of the new mill for want of funds has, perhaps, added to the disappointment. The only injury, however, that has been sustained is a short delay in proving to the shareholders the brilliant results that the mine is capable of giving, which will now quickly be seen, as our first mill will be completed by the time stated to the board. I do not like to make promises, but may safely say our first month's produce will fully bear out the most sanguine expectations that have been formed of the property, and we shall then only have to continue the erection of mills to enable us to leave large monthly profits. On July 1 last year operations were commenced on account of this company, and in September of that year the first remission of funds was received by Messrs. Restrepo and Sons at Medellin. From that date up to the end of June last I have received from Messrs. Restrepo the sum of \$18,515 6 4, being the value of 28500, sent by the board, and the difference of Exchange in our favour, which has been expended in the following manner:—In mine cost, \$6043 3 4; erection of new mill, \$4914 7; making shafts, &c., for conveyance of mineral to the mill, \$233 0 6; repainting roads, \$359 5; buildings and repairs, \$2179 7 7; materials and stores, \$2735 2; sundry cost, \$1001 5=817,467 7 1, showing a balance in hand of \$1047 7 3 to the date above mentioned.

MINE REPORT.

Colombia Lode: The Colombia level, the deepest on this lode, has been re-mined and opened up from the entrance to a distance of 20 fms., and the end has been driven 4 fms. 2 ins. through a lode varying from 1 to 2 ft. wide. The ground has been very hard, which accounts for the slight progress made. The mineral standing is of good quality, and will pay well for stopping. The total distance driven in this level is 50 fms. 2 ft. 8 ins. The Granadino level on the same lode has been driven 7 fms. 1 ft. by the present company, and previously 20 fms. 4 ft., making a total of 27 fms. 5 ft., and is 11 fms. 2 ft. above the Colombia level. The lode is from 1 to 2 ft. wide of good quality mineral, and the ground is very hard. There is a rise communicated from the Colombia to this level, which facilitates the conveyance of the mineral to the mill. The Antioqueno level, about 18 fms. above the Granadino, and about 50 fms. in advance, has been driven 5 fms. 3 ft. through a lode from 3 to 4 ft. wide, of good quality mineral, and has a total length of 17 fms. A short distance in advance of the present end, the lode is to be seen for more than 50 fms. on its course, the back of which was worked away by the ancients as a stream mine as deep as the water would allow, but only extracting the free gold, as there is a quantity of good mineral broken.

Gallano Lode: The Gallano level on this level has been widened and re-mined a distance of 30 fms., and is at present suspended. The Consuelo level, about 15 fms. above Providencia, has been driven by this company 26 fms. 2 ft., and has a total length of 48 fms. 4 ft. The lode is from 1 to 3 ft. wide, of red mineral of good quality. The rise from this to the Gallano level—a distance of 12 fms.—was communicated at the commencement of the month, and I have put the men to stop in each end of the rise, where the lode is producing mineral of good quality. We are busily engaged re-mining the Gallano level to communicate with the rise, and are advancing satisfactorily. The Conchana level has been driven by this company 1 fms., and is at present suspended, but will be resumed when we have sufficient miners. Antioqueno Lode: The Frontino level has been driven by the present company 15 fms. 1 ft. 6 in., and by the former workers 11 fms.: total 26 fms. 1 ft. 6 in. The end is suspended until the rise is communicated with the Antioqueno level, which will be effected during the present month. The Antioqueno level has been driven by this company 56 fms. 2 ft., and by the old company 29 fms. 3 ft., making a total distance of 85 fms. 5 ft. This level has laid open a large extent of good mineral ground, which is standing whole to the present end. The lode has greatly increased in width, and we are only at present carrying the hanging wall. During the present month I purpose cutting into the earth side to endeavor to reach the footwall, where I expect that we shall shortly meet with rich mineral. The lode in the end is looking well, but the ground is a little harder. From the present end we have backs at least 30 fms. in height, and every fathom we advance will give us an increase of 3 ft. From this point to the top of the mountain, it is not easy to calculate the height; the backs, however, that will be laid open will not be worked away in a century.

Surface Works: We commenced the preparatory works for the erection of the new mill in February last, which has experienced considerable delay, for the reasons which have been already stated; but I am happy to inform you that it is now in a forward state, and I trust will be ready to commence stamping by the beginning of September. In order to provide ample room for dressing-floors, carpenter's shop, storeroom, &c., under the same roof the house was made much larger than would otherwise be necessary, and consequently has taken more time to finish. I have also taken care that the materials should be of the best quality, particularly the timber, which has occupied considerable time and expense in bringing by hand; but not having the means of purchasing ore there was no alternative. I hope, however, in future a great part of this cost will be saved. High and strong walls have had to be built against the stream for the protection of the mill, and large arches are being made for depositing the sands. The buildings which have been erected consist of a dwelling house, office, cook-houses, overseers' rooms, smith's shop, and three sheds over the pits and spalling floors. These houses with kitchens have also been erected for miners and their families, and the old mill-house put in order for a barracks for the peons. The roads have been repaired a distance of four leagues to the village of Frontino, and several acres of woods have been cleared around the establishment. Two long shoots have been made for conveying the mineral to the mill, and another has been commenced to let down the mineral from the Antioqueno level. Wheelbarrow roads have also been made for bringing away the mineral and attle from the different levels.—WILLIAM J. GOYEN.

MINING IN AMERICA—THE LATE PRESIDENT'S MINING STOCK.

—Not the least valuable of the late President's possessions are 1000 shares of the stock of a mining company of San Francisco, the present market value of which is \$20,000. The mine is situated in Arizona, and is one of the most valuable silver mines in that Territory. It is in Pioneer District, Pinal County, 50 miles from the Southern Pacific Railway. The mine was developed and is chiefly owned by Col. James M. Barney, of Yuma, a pioneer merchant of Arizona, and formerly the heaviest freighter for the Government in that Territory. Some four or five years ago Col. Rockwell, the devoted attendant of the late President, was stationed at Yuma, and became the intimate friend of Col. Barney. When the latter bought the Silver King Mine he gave Col. Rockwell the opportunity of placing a large number of shares among his friends. The latter placed several thousand among his brother officers, and Gen. Garfield, then a member of Congress, was induced to take 1000 shares at \$4 a share. The stock has already paid the late President \$7500 in dividends, and is now worth in the market \$20 a share. The late President each year sent his proxy to be voted by Col. Barney in San Francisco. Mrs. Garfield will still receive an income of \$3000 a year from dividends on the Silver King stock. It is a pleasure to feel that a portion of one of our dividend-paying mines is likely to afford so considerable an addition to the income of Mrs. Garfield. Gen. Garfield's "pocket better than he knew" when he invested in Silver King. It is not probable that any other class of securities would have yielded so large returns for the money invested. We trust that this mine will continue its good work while the brave widow lives, and be a heritage to the children of such noble parents.

Mr. J. R. Jolly, member of the Metropolitan Board of Works, has joined the board of the House Property Trust (Limited).

that the Chile lode was about 2½ ft. thick, and no doubt it was when he looked at it; but the lode was of a very fluctuating character—it had been as much as 9 ft. thick at times—and it was fairly thought, to put the average thickness at 3 ft.; 4 ft. would probably be nearer the mark as an average. Then, with regard to the gold, of course it was an uncertain product in mining, and it was quite on the cards that they might get the same returns of gold again. He (the Chairman), in conclusion, said that they had called the shareholders together to hear what they had to say on the position of affairs, and he expressed the hope that they would discuss matters fully.—Mr. THACKER asked how much had been expended on the repairs to the mine?—Mr. G. W. Ross, who read a prepared speech, said he had read the prospectus issued by the company on its formation, and a more glowing description of a gold mine presented itself to him than he had ever before seen in the British public. (Applause.) It told them what the vendors had been doing on the property from Jan. 7, 1871, to September, 1880, and showed the produce of gold to have been upwards of 69,000 ozs., worth 254,000l., the most prosperous years having been from 1877 to 1880. In the last mentioned year, or rather three-quarters of it, 17,830 ozs. were produced, being at the rate of 23,770 ozs. per annum. Under these representations it was not to be wondered at that the shares were readily taken up, and stood at a considerable premium. (Hear, hear.) After the mine became the property of the company, however, the quantity of quartz decreased month by month, and what was more remarkable and painful, its quality also, the yield having been only 1 instead of 3 ozs. In the prospectus it was stated that the Chile lode contained sufficient quartz to supply 30 heads of stamps for the next eight years. Had this result been achieved it would have represented no less a sum than 752,000l., or a gross annual yield of 94,000l. The falling off in the quantity of tons crushed, however, did not appear to be so much a matter of complaint as the diminution in the yield per ton. According to the prospectus in no single month from January 1879 to 1880 had the yield been less than 2 ozs. per ton. He could not but think that the figures given to Messrs. Turquand were inaccurate. Mr. Symons stated that it would take from 1½ to 1¾ oz. to the ton to pay expenses, and under these circumstances he asked whether it would not be better to go into liquidation at once. (Hear, hear.) Which of the reports was the more entitled to belief, that of Mr. Symons, the paid engineer of the company, or to Mr. Provis, whose interest it was to puff the concerns? (Applause.) It was unfortunate that the directors attempted to discredit Mr. Symons's report on account of his ill-health. He (Mr. Ross) thought it better to face the actual state of affairs than to indulge in a fool's paradise, for he believed Mr. Symons's report to be a bona fide truthful statement. He thought they should have full information as to the cost of opening up the Peru Mine, and as to how the necessary capital was to be provided. (Hear, hear.)

The CHAIRMAN wished to correct one remark of Mr. Ross's as to Mr. Symons's report. He (the Chairman) stated that he believed the report to be honest, just, and very able. Mr. Ross moved that a statement of accounts up to the present time should be prepared at once, and a meeting convened at an early date to consider the same. Sir THOMAS WHITE thought they would have to express entire dissatisfaction with the whole proceedings from the beginning to the allotment of shares. (Applause.) He had bought 600 shares at 15s. premium. He believed that certain gentlemen highly favoured by the board, who got shares when other people did not, did not hold so many shares now as they did. (Applause.) The intelligence which the Chairman now gave for the first time was known upon the Stock Exchange before the directors knew it; everything was known on the Exchange to induce those who held shares to throw them on the market. He believed that they had purchased a property of which all the gold was exhausted—(applause)—and he thought the directors should return to the shareholders their subscriptions to save legal proceedings.—Mr. KEVIL seconded the motion moved by Mr. Ross.

Mr. BLADON thought the very fair inference was that the mine had been utterly worked out at the time the prospectus was issued, that the returns of gold were magnified, and the expenditure kept down to the lowest minimum as to the cost of a good prospectus, and they all knew that if that could be proved the vendors would be held responsible. They were not making their expenses, and he believed that 100,000l. in cash would have been ample payment for the property, and that another 100,000l. should have completed the capital of the company. He moved "that five of the largest shareholders, not connected with or in any way representing the vendors' interests, be appointed to confer with the directors for the purpose of ascertaining what concessions the vendors are prepared to make to the company, and to report thereon."—Mr. THACKER seconded the resolution.

Sir T. WHITE asked how many shares the directors held when the company started, and how many they had now?—Mr. Ross withdrew his motion in favour of that proposed by Mr. Bladon.

The CHAIRMAN remarked that if there were to be litigation the committee would have to work outside the board. He came to conduct a mine and not a lawsuit, which he did not understand. (Hear, hear.) If litigation were to be commenced, he must ask them to relieve him of his position. If they had a committee similar to that suggested by Mr. Bladon that seemed to cover everything required, and if they could manage to conduct matters without litigation no doubt it would be better to do so. (Applause.)

Mr. ROWAT thought that if any false statement appeared in the prospectus, or anything had been suppressed which should have been made known to the shareholders, the vendors should be made liable to return the whole of the subscriptions. It seemed to him that the mine was pretty well exhausted before it was handed over to the company. (Hear, hear.) He supported the motion proposed by Mr. Bladon.—A SHAREHOLDER hoped that the committee would be quite independent of the vendors or directors, and thought the directors should have competent persons to the mine to see that the representations made by the vendors were correct. He was aware that one of the directors had been to see the property, but he was not aware that that gentleman had any sufficient knowledge of mining matters. It had been hinted that some of the directors who were originally large shareholders were now very small shareholders, the Chairman in particular.—The CHAIRMAN had no hesitation in saying that he had sold a portion of his shares. He firmly believed in the mine, had become a very large shareholder in it, but he was not bound to hold the same number of shares in perpetuity. He was not the vendor of the mine, and he was confident that the sale of a trumpery number of shares out of 360,000 was not the evil they were labouring under now.—Mr. BLADON did not wish to cast any slur on the directors, who were not vendors.

Sir T. WHITE remarked that others were buying shares while the directors were selling. He asked how many shares the directors now held and how many they originally held? They would then be enabled to arrive at some opinion of the confidence which those gentlemen had in the undertaking. (Applause.)

Mr. MATTHEWS advocated the appointment of a committee of investigation, believing that good would come of it if the committee were left unfettered in their proceedings. (Hear, hear.)—Mr. ROWAT thought the circumstances connected with the inception of the company should be enquired into.

Mr. MATTHEWS added that as a civil engineer with some experience in Venezuela he had the utmost confidence in the mineral wealth of the country. He believed that if they worked the mine properly they would get all their money back.

Mr. PROVIS denied in the most positive manner that he was paid to puff the mine, or that he had any idea of the formation of a public company to work it when he made his report, having been sent out to manage the property for Messrs. Somes and Co. He had not been there long when his health broke down, and he was obliged to return to England. Mr. Dunstan, who was in charge of the mine in May, wrote to say that there was a splendid vein of ore with 12,000 tons of reserves to open upon.

Sir T. WHITE said he thought Mr. Provis's report was full of discrepancies. Mr. SCRIVEN (a director) said he fully appreciated his responsibility, and was prepared to bear it, having thoroughly gone into the whole matter before he accepted the office. He was a very large shareholder, and had never sold a share. He took a large number on allotment, and he had since bought some at a premium. (Hear, hear.) Those who bought shares at a premium were naturally more sore than those who bought at par; but the directors did not profess that the shares were worth twice what they were issued at. He thought any question of litigation after the figures which the Chairman had put before them would not be warranted. (Hear, hear.) The prospectus put forward a property of which the gold concern was the Chile lode, and to which the future was the Peru lode. On the latter they had Mr. Symons's opinion. He did not speak so highly of the Chile lode as the prospectus did; but he spoke very highly of the Peru lode. Mr. Scriven went on to point out that the position of the company was not of the hopeless character that some of the speakers would seem to infer, and referred to the difficulties experienced on account of the illness of the three successive managers, and the deficiency of labour, and remarked that leaving the sulphides out of the question, and putting the worst complexion on things, the total loss had not exceeded 22,000l., while the amount of capital in hand was at least 55,000l. (Applause.)

The CHAIRMAN, in reply to Sir T. WHITE, said he originally held 5000 shares. He now held 610.

Mr. SCRIVEN said he held 600 shares, and his partner and himself held 1000 between them originally. They had since purchased 200 or 300 more, and had not sold one. The shares he last bought were bought at 7½ prem. (Applause.)

Mr. DUFF said he purchased 3000 shares, and still held that number, and Mr. NEVETT said he held 1130 shares, and Mr. HAIN said he held 4000 shares. Mr. PROVIS added that he held 800 shares, and had not sold any, and he and his personal friends had taken over 8000 shares.

Mr. SOMES said he held 50,100 shares. He was bound under agreement to hold 50,000 shares for twelve months. He was, therefore, at liberty to sell 30,000, but he had not sold one. (Applause.) He denied altogether any foundation for the aspersions which had been thrown upon his character with regard to this company. He had had no idea of forming a company, and indeed Mr. Webster, the then manager of the mine for his firm, wrote a month after the company was formed saying he was quite astonished at the mine being formed into a limited company, and said that if he had known that a company was to be formed he would have made a more particular report, and that Mr. Provis's report was well within the mark. (Hear, hear.) Nothing would please him more than that a committee should be formed. Mr. Hahn and himself opened this mine ten years ago, and they went on and did not get any satisfactory result until 1877, and from then till 1880 the figures had been furnished to them, and those figures could be proved most conclusively. He was quite sure that the more this matter was looked into the more unjust would every straightforward shareholder be ready to say were the accusations which had been made against him. (Applause.) The committee should see every letter in connection with the matter whether private or not. Mr. Lattey (who was unfortunately unable to be present, owing to the serious illness of his mother and father) was the first to open negotiations in this matter. He (Mr. Somes) said at once that he would not part with the property except on terms which he considered to be sufficient, having kept the mine going until it was paying well. He believed as confidently as he believed anything that the company would flourish quite as much as was predicted of it in the prospectus. In his long experience in the concern he had had many disappointments, and for several months in one comparatively recent year the return was not more than 10s. to the ton. The yield had always been variable, but in 1880 the average output kept up. The lode had narrowed before, but it had gone out again, and the yield had decreased and increased more than once, and there was no reason to suppose that the same fortunate circumstances would not occur again. He particularly wished the shareholders to come to the office and look into matters, and satisfy themselves as to the negotiations that preceded the formation of the company. These negotiations Mr. Somes referred to in detail, and then stated that he allotted 100,000 shares amongst his private friends, and these were still amongst the largest shareholders in the company. (Applause.) The facts were all against the idea that he brought the company out with anything like an idea of swindling the public. (Applause.) If he had had such an intention he would not have retained his large holding when he could have sold 30,000 shares at a

large premium. He could have sold 5000 shares at 13-16 premium, and the application was that if he did not wish his name to appear it could be arranged, but he declined to do so. (Hear, hear.) Nor had anybody a claim to one of his shares. (Loud applause.) At any rate, they would see his determination to stand or fall by the company. It was too early to talk of the purchase money being too large: the whole misfortune was the falling off in the value of the quartz, and the immense difficulties under which they had laboured since the formation of the company. He had been as much surprised and disappointed as any of the shareholders, not only because of his large interest in the company, but because of the large number of his friends who had taken shares unsolicited by him. He did not hesitate to say that a more honest prospectus was never published, and he made that statement without any fear of contradiction. He deprecated litigation, though that would undoubtedly clear him from the aspersions which had been cast upon him. Mr. Somes again expressed his desire for the fullest investigation of the history of the property and the formation of the company, and said he had no hesitation in believing that the Peru lode alone would give the shareholders a fine return on their investment.

Mr. MATTHEWS moved, as an amendment to the motion made by Mr. Bladon:—"That a committee of enquiry, consisting of seven shareholders be appointed to confer with the directors upon the position of the company, and report to the shareholders as early as possible." Mr. CHARLES LEVY seconded the amendment, which on being put was carried by a large majority, and on being put as a substantive motion it was carried *non dissent*.

The following shareholders were elected to form the committee:—Sir T. White, Messrs. C. Levy, Matthews, Higgins, Dunlop, Keovil, and Richards.

GREAT ZARUMA GOLD MINING COMPANY.

An extraordinary general meeting of shareholders was held at New Exchange Buildings, George Yard, Lombard-street, on Monday, Mr. E. PACKARD in the chair, to confirm the following special resolutions passed at the extraordinary general meeting held on Oct. 17 last:—

That the Articles of Association of the company be altered in the manner following:—

(a) In Article 35 the word "three" shall be struck out, and the word "six" substituted therefor.

(b) That Article 31, together with the words "contracts with direct" printed immediately above the same, shall be expunged.

(c) That the following words be added to Article 114:—"The directors shall not, on behalf of the company, for any purpose whatever purchase any shares of the company."

Mr. CHESTON: I have to move that the resolution passed at the extraordinary meeting held on Oct. 17 for the alteration of the Articles be confirmed at this meeting. They are certain alterations, not very important, which the Stock Exchange thought desirable before they granted a settlement. If any gentleman wants any information upon them I am ready to give it.

Mr. BESSELL seconded the motion, which was put and carried. The first statutory general meeting of shareholders was then held.

The CHAIRMAN said: Gentlemen, I am very pleased to state we have received some very satisfactory intelligence from our mining engineer, Mr. Raymond de Peiger. Mr. de Peiger arrived out at Guayaquil on the 29th of August, and on the 2nd of the following month of September he proceeded to Zaruma, and we have received this morning a letter from Zaruma, which is the first intimation we have received of his arrival there. I think, perhaps, before I read the letter I would just explain to you that in the interval after the first supply of ore was sent us Mr. Munoz had been able to lay bare a mine which had been filled with water for very many years—he says in his letter certainly not less than 40 years—and the sample which he sent us was at once put into the hands of the assayer, and the result of that examination was that it assayed 6 ozs. of gold and 6 ozs. of silver to the ton. That is a very satisfactory result. If any gentleman present would like to see the assays of the different ores which have been sent over I shall be happy to hand them to him. I do not know that it is worth while going over the whole of them, which are remarkable in results. There are three or four of the mines which show well in silver as well in gold. There is one which shows 5 ozs. 17 dwts. of silver and 2 ozs. 15 dwts. of gold to the ton. I will now read Mr. de Peiger's letter. He writes:

Zaruma, Aug. 13.—On my arrival at Zaruma on the 6th of the present month I at once went to work to form a general opinion of the value of the property of which the board of directors had the kindness to put me in charge. Of course, in so short a time I can only give you a very superficial report, but as there are some very striking features, I think it my duty to make them known to you without further delay. First of all, I may say that the mineral is very abundant and easily worked. Secondly, the water power is sufficiently abundant for any number of stamps. Thirdly, the timber, although it has to be drawn from a certain distance over bad roads, is sufficient and of fair quality. Fourthly, the road over which the machinery has to be taken at present is very bad, but I am told that a new road to Santa Rosa could easily be opened at a small expense with the help of the Government, which we are just securing. In the course of the week a force of 25 men will start to open a path, which will allow me to judge of the difficulties and the expense of the undertaking. Fifthly and finally, there is another difficulty which can very easily be overcome—that is, the question of labour. The labour to be had in Zaruma for mining purposes is very poor and very scarce. I have, therefore, been obliged to send immediately to Peru for some 50 miners and to Guayaquil for some ordinary labourers. More will come later from the various provinces of the Republic. Taken altogether, my first impressions are certainly favourable, as we have in hand plenty of cheaply-worked minerals, plenty of water power, and sufficient wood, and as, on the other hand, the road and labour questions can be settled without difficulty and with little expense. In my next communication I will enter into full details about the value of the different mines, as I shall have by that time assayed a certain quantity of the different materials which compose them. In the meantime you may consider the facts stated in the present letter as fully established. I hope that my next communication will be still more favourable.—R. DE PEIGER, General Manager.

Mr. LEVINSON has also received a letter from Mr. de Peiger. He writes:—"As to the mines, what I could not say in my official letter, not having any material certificate to support my moral convictions, I can privately say to you. I am very well satisfied with the look of the mineral and with its abundance. I have great faith in the undertaking, not only from what I hear but also from the extensive workings, which I have already examined, and I must add from the splendid formation of the veins, which can be easily worked. Of course, of the mineral I can say nothing, not having yet had time to survey it, but from its looks I should be very much inclined to think it did not turn out good. Some of it will be amalgamated without roasting, some will require roasting, and some will require smelting. But the veins are so near one from the other that we can depend upon any amount of mineral. I am convinced that my miner's experience and instinct do not mislead me; but naturally, for the board of directors and the shareholders I must have more material proofs before I can express so decided an opinion. I think you will agree with me that after something like four days' examination that is as satisfactory an account as you could possibly expect to receive from an intelligent miner, which Mr. de Peiger is. (Cheers.) Gentlemen, I have now to propose the re-election of the retiring directors, Mr. Ringland, Mr. Northern, and Mr. Halford.—Mr. DURHAM seconded the motion, which was put and carried.

A SHAREHOLDER asked whether the two gentlemen over in America (one of them the British Consul), who were expected to join the board when the formation of the company was complete, had yet joined?—Mr. CHESTON: We have not received notice that the transfer of the mines has been legally completed, and until that is done those gentlemen will not join the board. It may be expected by the next mail.—Messrs. Durham and Batchelor were then elected auditors of the company.

Mr. CHESTON said that concluded the business. He believed they had good mines, which in the course of six or eight months would turn out something to the advantage of the shareholders.

Mr. BESSELL said he hoped the shareholders would not be kept till the next meeting without information, and suggested that if interesting and important reports were received in the meantime they should be sent to the shareholders. What the shareholders wanted to know was the actual results of the working.

Mr. LEVINSON said there would be no difficulty in getting information. As soon as a settlement was obtained the reports would be sent to the Stock Exchange, and then they would be put up.

A cordial vote of thanks was then passed to the Chairman and directors.—The CHAIRMAN acknowledged the compliment, and the meeting broke up.

CARNARVON GREAT CONSOLS LEAD MINING COMPANY.

The ordinary general meeting of shareholders was held at the Guildhall Tavern, Gresham-street, on Monday, Mr. GEORGE VANS AGNEW in the chair.

Mr. KING (the secretary) read the notice convening the meeting. The CHAIRMAN said this was the statutory meeting of the company, which they were obliged to hold within four months of the incorporation of the company. There was very little to be said, except that the directors saw their way to proceed with a working capital of 4500l., and they thought they might venture to carry on the mine with that amount, especially as it was hoped that in a very short time the mine would be paying its own way. By the last accounts from the property they had 20 tons of lead ready for dressing, and he hoped that the amount would very soon be increased.

They had engaged the services of Capt. Borlase, and proposed to send him down at once to start the engine. Of course, there was no time to be lost in starting operations vigorously, and they would do so with the hope and belief that the mine would soon be in a paying position. The directors would be happy to give the shareholders all the information in their possession.

Mr. JENKINS asked the names of the directors?—The CHAIRMAN said his two colleagues were Mr. Endean and Mr. Scott. He was largely interested in the mine, and the directors had decided not to ask for any remuneration until the mine was being worked at a profit. (Hear, hear.)

Mr. ENDAN fully agreed with the decision which had been arrived at by the directors not to accept any remuneration until the company was in a profitable state, and until such remuneration could be paid out of the profits of the mine. He did not propose to remain on the directorate, but he had great faith in the mine, and had taken the helm when the ship got into a storm. Since the liquidation of the old company he had provided all the funds necessary to carry on the mine as they had been required, otherwise the lease would have suffered. He had no doubt about the ultimate success of the mine, otherwise he would not have put his money into it. He had taken up his proportion of shares—250—and he had undertaken to take another 2000 for himself, and 2000 for a member of his family. (Hear, hear.) He did not think he could give any better guarantee than that of his faith in the mine. He had joined the board as there was nobody else ready to do so when the company was started, but he now wished to retire if some large shareholder would accept his seat. (Applause.)

Mr. JENKINS said it was very satisfactory to know that they had substantial and tangible men on the board, and that his own part expressed a strong hope that Mr. Endean, who knew the mine better than anybody else, would not leave the board.

The CHAIRMAN remarked that Mr. Endean would still retain his large interest in the mine, and would always be ready to assist the board with his advice.

Mr. ENDAN added that he proposed to go to the mine in the course of a few days, and Capt. Borlase would go down at once to take charge of the property. The water was in the mine at present, but they had been working above the adit stopping ore ground, from which the 20 tons of ore referred to by the Chairman had been raised. He had fully expected more, but the men had only been working at points where ore had been discovered previously. They would have to get the water out, and sink the main shaft. This was the great work they had in view, and when it was sunk 3 fms. lower a plat could be made and level driven, and they would then be able to lay open the reserves laid open by Capt. Knapp, who was now in America, and, therefore, a new agent had been appointed. He knew that the mine was a good one, and that the only thing required was good management. Capt. Richards, who inspected the mine, said that he could raise 100 tons a month from the mine, but that was before it got into difficulties. The new agent was a young man, and he (Mr. Endean) was of opinion that a young man who would go down the mine every morning, and see what the men were really doing, was better than an older man who could only go down now and again. He was sure that everything that could be done would be done to promote the prosperity of the company, but with regard to his remaining, director, it must be understood that he had agreed to take additional shares in a fiduciary position, and being himself a shareholder he thought it would not be right for him to remain on the board, for he did not want any question to be raised hereafter as to his position at the board giving him opportunities of knowing more about the mine than he should have done. The Chairman held 750 shares, and Mr. Scott, another director, also held a large interest in the concern.

Mr. COLLARD asked whether Capt. Borlase had worked mines in Wales?—Mr. ENDAN did not think he had, but he was a thoroughly practical miner, and had had many years experience.

Mr. VIVES asked how much capital had been raised, and at what price Mr. Endean would take up the shares for which he had so generously applied?—Mr. ENDAN replied that he would take up the shares on the same conditions as the other shareholders had taken their shares. If he did not do so they would not have the necessary working capital.

Col. RODEN asked what had been the result of the reconstruction so far?—The CHAIRMAN said 200 shareholders applied for 16,279 shares, which represented a subscription of 8139l. 10s. The debts, including an estimate of 1500l. for costs, amounted to 6580l., but of that amount Mr. Endean was a creditor for 3200l., and had agreed to accept a mortgage for 2000l. in place of a mortgage for a like amount on the old company. The 1300l. balance was cash advanced by Mr. Endean to keep the mine going.

Mr. SPETTIGUE felt confident in the success of the mine, and that it had only to be properly managed to bring about a profitable future. Mr. Endean had a very large amount of money at stake, and he trusted that the shareholders would support him as far as they possibly could.—Col. RODEN asked how many shares had fallen through?—The CHAIRMAN replied that over 15,000 shares had not been applied for.

Mr. ENDAN remarked that for about 8000l. the shareholders were obtaining a mine upon which 40,000l. had been spent. They had everything at surface that could possibly be required for the working of the mine. They had dressing machinery capable of returning over 100 tons a month, besides a burning house, Californian stamps, a Blake's stone-breaker, and every article which they required. The unfortunate mistake made by the old company was the large outlay made at surface before the shaft was got down to a sufficient depth to make proper returns. If they had sunk the shaft, driven levels, and shown the public that lead was there in large quantities, all the money necessary to put up the machinery at surface would soon have been forthcoming. They had simply to sink the shaft for another 3 fms., and then they would be able to drive a level in and take away the reserves.

The CHAIRMAN, in reply to another question, said they had a balance of 3579l., but Messrs. Endean and Co. had agreed to take up 5000 shares at 10s. each, at the rate of not less than 100 a month; and this would give them ample working capital. He then moved—"That the directors be authorised to allot 3000 fully paid shares at 10s. per share, being at a discount of 75 per cent., and to any further amount not exceeding 5000 to the present shareholders who may apply for them within one month."—Col. RODEN seconded the motion, which was carried unanimously.

Mr. VIVES referred to the desirability of holding half-yearly meetings, and issuing half-yearly balance-sheets.—The CHAIRMAN, in reply said the Articles provided for only one meeting and one statement of accounts in the year; but the directors, wishing to conceal nothing, would be very happy to meet the wishes of the shareholders in the manner suggested, or to call a special meeting whenever it seemed desirable to do so.

Capt. BORLASE was introduced to the meeting by Mr. Endean, and in returning thanks said he had 16 years' experience in Cornwall and Yorkshire. On the motion of Col. RODEN, seconded by Mr. VIVES, a vote of thanks was passed to the Chairman and directors, and the meeting then closed.

TUCOPILLA COPPER MINING AND SMELTING COMPANY.

An extraordinary general meeting of shareholders was held at the offices of the company, Queen-street-place, on Wednesday, for the purpose of confirming a special resolution passed at the general meeting held on Sept. 29.—Mr. EDMUND A. FORTHEX in the chair.

The notice convening the meeting having been read,

The CHAIRMAN said: Gentlemen, this meeting is, as has been explained, purely a formal one, for the purpose of confirming the special resolution which was unanimously passed at the general meeting of the company, held two or three weeks ago. The reasons that suggested the alterations were then fully explained, and I do not think it necessary to re-perpetrate what I then said. I will, therefore, propose that the following special resolution passed at the general meeting, held at the Cannon-street Hotel, on Sept. 29, be and the same is hereby confirmed:—"That the Articles of Association of the Tucopilla Copper Mining and Smelting Company (Limited) be altered and varied by cancelling Article No. 18; by altering Section 2 of Article No. 58 by striking out therefrom the following words: 'either fully or to any amount'; and also by striking out from Article No. 88 the following words: 'and all dividends unclaimed for three years after having been declared may be forfeited by the directors for the benefit of the company.' You will remember from the previous notice to what these alterations refer. Article No. 18 had reference to the directors not being bound 'to enquire into the validity, legal effect, or genuineness of any deed or transfer produced by a person claiming as transferee of any share.' With regard to Article 58, the alteration is really none at all, because the article provided that we should not issue any partly paid shares in payment of the purchase money. We never proposed to do so. Article 88 simply had reference to the time at which the claim of any shareholder for a previously unclaimed dividend should lapse. I, therefore, propose that the resolution be passed.—Mr. JOHN GALSWORDY seconded the proposition, which was carried unanimously.—The meeting then closed.

SOUTH WHEAL CROFTY.—At the meeting, on Oct. 14, the accounts for the twelve weeks ending Sept. 17 showed a loss of 737l. 19s. 11d., and a total debit balance of 3194l. 3s. 3d. A call of 7s. 6d. per share was made. Capt. Josiah Thomas and Wm. Pascoe reported upon the various points of operation, and in conclusion said:—"The 180, west of cross-cut, on the north lode, is worth 12l. per fathom. We are driving the 160 cross-cut north with the hope of intersecting this lode shortly, and have just passed through a branch which may probably have some connection with the lode. The 160 west is driven to within 10 fms. of this cross-cut, so that if anything of value should be met with in the 160 a communication between these two levels can easily be effected. Our loss for this quarter is less than for a long time past, and a small improvement in the western ground, which we think we may reasonably hope for, would soon put the mine in a paying state."

MARKET VALLEY.—At the meeting on Wednesday (Mr. W. Belingham in the chair), the accounts for the 16 weeks to Sept. 17, of 2383l. 12s. 4d.; a balance due to bankers of 1000l. 16s. 3d.; and a balance of liabilities over assets of 62l. 7s. 3d. The calls received during the 16 weeks amounted to 2233l. 13s. 11d. A call of 4s. per share was made. Capt. George and Renals, after referring to the referring to the various points of operation, said with regard to Wheal Jenkins: During the past quarter this part of the property has also had our careful attention, and while we have cleared and secured a long run of levels, shafts, &c., at a considerable addition to our usual costs, we are pleased to say that in our opinion the results are so far satisfactory. The lode has been very extensively worked as low as the adit level, and from a slope we have put over the bottom for a few fathoms in length, it is quite evident a large quantity of tin must have been returned, as we have sold from the small trial this made about 20l. worth, although our stamping and dressing capabilities were very limited and incomplete, being obliged to use the old copper stamps and floors for the purpose. We have, therefore, every confidence that this will ultimately prove a great acquisition to the mine, and strongly recommended its vigorous development.

Messrs. HARRINGTON, HORAN, and Co. (Liverpool, Oct. 14).—Chill coppers charters for the second part of last month were announced on the 3rd instant at 2000 tons fine, consisting of 1050 tons bars and ingots, 400 tons ores and regulus of England, and 550 tons bars for the Continent. We are without any news of charters for first part of this month. Notwithstanding the unsettled state of the money market during the past fortnight a good business has been done in Chill bars at 62l. 10s. to 64l., according to prompt and brand. Market to-day is firm, sellers asking 63l. for good ordinary brands on the spot. The sales of furnace material comprise 163 tons Chillian regulus at 13s. 3d., 50 tons Peruvian ores at 13s., 1500 tons Quebrada ore to arrive here at 12s. 3d., 30 tons Battle Mountain ore at 12s. 6d., 100 tons Mason's Spanish precipitate at 13s., 250 tons Rio Tinto at 13s. 3d., 100 tons English at 13s., and at the Swansea sale by tender 1052 tons ores, average produce 75 per cent., realised 11l. 5s. d. per unit. Import of Chill copper during the past fortnight, 1737 tons fine, against 511 tons same time last year; delivery of Chill copper during the past fortnight, 2260 tons fine, against 1053 tons same time last year; import of other copper during the past fortnight, 790 tons fine; delivery of other copper during the past fortnight, 532 tons fine. Arrivals here during the fortnight of West Coast, S.A., produce:—Britannia, from Valparaiso, &c., 50 tons ores, 250 tons bars, 150 tons ingots; Polaist, from Valparaiso, &c., 190 tons regulus, 25 tons bars; At Swansea, Lord Marmion, from Caldera and Coquimbo, 725 tons bars; Capricorn, from Carrizal, 530 tons regulus; Bessie Jose, from Tucopilla, 598 tons ores, 317 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	—	—	15,605	423	—
Swansea	—	5,292	9,511	205	—
Total	—	5,292	25,987	628	—

Representing about 22,425 tons fine copper, against 28,948 tons Sept. 30; 35.6

tons Oct. 15, 1880; 28,775 tons Oct. 15, 1879; 23,275 tons Oct. 15, 1878. Stock of copper contained in other foreign ore and Spanish precipitate, 1141 tons fine, against 2542 tons Oct. 15, 1880. * Stock of Chili bars and ingots in Havre, — tons fine, against 5885 tons Oct. 15, 1880. * Stock of copper other than Chili in Havre, — tons fine, against 1000 tons Oct. 15, 1880. Stock of Chili copper and charcoal for to date, 7900 tons fine, against 12,200 tons Oct. 15, 1880. * Stock of foreign copper in London, chiefly Australian, — tons fine, against 5070 tons Oct. 15, 1880. * Owing to telegraphic interruption, we are without any advice of these stocks.

According to the Board of Trade Returns the total imports and exports into and from this country for the first nine months of the following years were—

IMPORTS.	1879.	1880.	1881.
Copper in ores.....Tons	3,844	10,150	9,932
Copper regulus and precipitate	19,802	19,533	20,891
Bars, cakes, and ingots	54,703	23,504	25,445
In pyrites (estimated)	9,270	13,220	10,639
Total.....	72,588	72,807	65,017
EXPORTS.	1879.	1880.	1881.
English copper, wrought and unwrt. Tons	24,224	22,819	25,455
Foreign copper, unwrought	13,006	11,961	11,156
Yellow metal	12,740	12,131	11,545
Total.....	49,970	46,911	48,156

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine share-dealer, Redruth (Oct. 20), writes:—Carn Brea advanced $\frac{1}{2}$, Dolcoath $\frac{1}{2}$, East Pool $\frac{1}{2}$, Killifreth $\frac{1}{2}$, North Bury $\frac{1}{2}$, South Crofty $\frac{1}{2}$, Wheal Jane $\frac{1}{2}$, and Wheal Grenville $\frac{1}{2}$, in our market early in the week. West Fraces fell to 18, but afterwards touched 20. To-day market is dull with very little doing. No alteration of the tin standards have as yet been made. Prices are as follows:—Blue Hills, $\frac{1}{2}$ to $\frac{3}{4}$; Carn Brea, $\frac{1}{2}$ to $\frac{3}{4}$; Camborne Vein, $\frac{1}{2}$ to $\frac{3}{4}$; Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Dolcoath, $\frac{1}{2}$ to $\frac{3}{4}$; East Pool, $\frac{1}{2}$ to $\frac{3}{4}$; Killifreth, $\frac{1}{2}$ to $\frac{3}{4}$; Mellanear, $\frac{1}{2}$ to $\frac{3}{4}$; New Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; New Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; North Bury, $\frac{1}{2}$ to $\frac{3}{4}$; Penhall, $\frac{1}{2}$ to $\frac{3}{4}$; Phoenix, $\frac{1}{2}$ to $\frac{3}{4}$; Ped-an-drea, $\frac{1}{2}$ to $\frac{3}{4}$; South Crofty, $\frac{1}{2}$ to $\frac{3}{4}$; South Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; Tincroft, $\frac{1}{2}$ to $\frac{3}{4}$; West Basset, $\frac{1}{2}$ to $\frac{3}{4}$; West Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; West Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; West Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; West Pollice, $\frac{1}{2}$ to $\frac{3}{4}$; West Tolgus, $\frac{1}{2}$ to $\frac{3}{4}$; West Seton, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Agor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Basset, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Comfort, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Grenville, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Jane, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Prussia, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Uny, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Boys, $\frac{1}{2}$ to $\frac{3}{4}$.

—Mr. J. H. REYNOLDS, stock and share broker, Redruth (Oct. 20), writes:—A fair amount of business has been done in all the leading shares during the week, including Carn Brea, Dolcoaths, and East Pools, at higher prices; but do not close at their best except for West Fraces, which have improved to 20 buyers. Wheal Jane also in demand on a good discovery. Subjoined are the closing prices:—Blue Hills, $\frac{1}{2}$ to $\frac{3}{4}$; Carn Brea, $\frac{1}{2}$ to $\frac{3}{4}$; Camborne Vein, $\frac{1}{2}$ to $\frac{3}{4}$; Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Dolcoath, $\frac{1}{2}$ to $\frac{3}{4}$; East Pool, $\frac{1}{2}$ to $\frac{3}{4}$; Killifreth, $\frac{1}{2}$ to $\frac{3}{4}$; Mellanear, $\frac{1}{2}$ to $\frac{3}{4}$; New Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; New Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; North Bury, $\frac{1}{2}$ to $\frac{3}{4}$; Penhall, $\frac{1}{2}$ to $\frac{3}{4}$; Phoenix, $\frac{1}{2}$ to $\frac{3}{4}$; Ped-an-drea, $\frac{1}{2}$ to $\frac{3}{4}$; South Crofty, $\frac{1}{2}$ to $\frac{3}{4}$; South Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; Tincroft, $\frac{1}{2}$ to $\frac{3}{4}$; West Basset, $\frac{1}{2}$ to $\frac{3}{4}$; West Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; West Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; West Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; West Pollice, $\frac{1}{2}$ to $\frac{3}{4}$; West Tolgus, $\frac{1}{2}$ to $\frac{3}{4}$; West Seton, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Agor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Basset, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Comfort, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Grenville, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Jane, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Prussia, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Uny, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Boys, $\frac{1}{2}$ to $\frac{3}{4}$.

—Messrs. AMBOTT and WICKETT, stock and share brokers, Redruth (Oct. 20), write:—Only a limited business has been done in the past week, and prices show but little alteration. The share market so far has not responded to the upward tendency of tin. Closing quotations annexed:—Blue Hills, $\frac{1}{2}$ to $\frac{3}{4}$; Carn Brea, $\frac{1}{2}$ to $\frac{3}{4}$; Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Dolcoath, $\frac{1}{2}$ to $\frac{3}{4}$; East Pool, $\frac{1}{2}$ to $\frac{3}{4}$; Killifreth, $\frac{1}{2}$ to $\frac{3}{4}$; New Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; New Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Penhall, $\frac{1}{2}$ to $\frac{3}{4}$; Phoenix, $\frac{1}{2}$ to $\frac{3}{4}$; Ped-an-drea, $\frac{1}{2}$ to $\frac{3}{4}$; South Crofty, $\frac{1}{2}$ to $\frac{3}{4}$; South Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; Tincroft, $\frac{1}{2}$ to $\frac{3}{4}$; West Basset, $\frac{1}{2}$ to $\frac{3}{4}$; West Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; West Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; West Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; West Pollice, $\frac{1}{2}$ to $\frac{3}{4}$; West Tolgus, $\frac{1}{2}$ to $\frac{3}{4}$; West Seton, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Agor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Basset, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Comfort, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Grenville, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Jane, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Prussia, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Uny, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Boys, $\frac{1}{2}$ to $\frac{3}{4}$.

—Mr. M. W. BAWDEN, Liskeard (Oct. 20), writes:—The mining market is moderately active for good progressive stock, especially those mines with dividends in advance. Although the price of tin is daily advancing the smelters have not officially noted any advance on the tin standard. South Crofty, Phoenix United, Wheal Grenville, Wheal Jane, and Wheal Uny chiefly in demand. At the South Crofty meeting on Oct. 14 there was a debit balance of 2477 3s. 2d., and a call of 7s. 6d. per share was made. At a meeting of West Phoenix shareholders held on Tuesday, Oct. 17, a call of 2s. 6d. per share was made. Subjoined are the closing prices:—Bedford United, $\frac{1}{2}$ to $\frac{3}{4}$; Carn Brea, $\frac{1}{2}$ to $\frac{3}{4}$; Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Dolcoath, $\frac{1}{2}$ to $\frac{3}{4}$; East Pool, $\frac{1}{2}$ to $\frac{3}{4}$; Killifreth, $\frac{1}{2}$ to $\frac{3}{4}$; New Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; New Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Penhall, $\frac{1}{2}$ to $\frac{3}{4}$; Phoenix, $\frac{1}{2}$ to $\frac{3}{4}$; Ped-an-drea, $\frac{1}{2}$ to $\frac{3}{4}$; South Crofty, $\frac{1}{2}$ to $\frac{3}{4}$; South Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; Tincroft, $\frac{1}{2}$ to $\frac{3}{4}$; West Basset, $\frac{1}{2}$ to $\frac{3}{4}$; West Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; West Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; West Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; West Pollice, $\frac{1}{2}$ to $\frac{3}{4}$; West Tolgus, $\frac{1}{2}$ to $\frac{3}{4}$; West Seton, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Agor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Basset, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Comfort, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Grenville, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Jane, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Prussia, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Uny, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Boys, $\frac{1}{2}$ to $\frac{3}{4}$.

—Mr. JOHN CARTER, mine sharedealer, Camborne (Oct. 20), writes:—The share market has been steady during the week, but to-day there is again a weaker tone, and slightly lower prices ruling. Wheal Grenville, West Fraces, Wheal Jane, East Pool, and South Crofty have improved. Closing prices herewith:—Carn Brea, $\frac{1}{2}$ to $\frac{3}{4}$; Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; Dolcoath, $\frac{1}{2}$ to $\frac{3}{4}$; East Pool, $\frac{1}{2}$ to $\frac{3}{4}$; Killifreth, $\frac{1}{2}$ to $\frac{3}{4}$; Mellanear, $\frac{1}{2}$ to $\frac{3}{4}$; New Cook's Kitchen, $\frac{1}{2}$ to $\frac{3}{4}$; New Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; North Bury, $\frac{1}{2}$ to $\frac{3}{4}$; Penhall, $\frac{1}{2}$ to $\frac{3}{4}$; Phoenix, $\frac{1}{2}$ to $\frac{3}{4}$; Ped-an-drea, $\frac{1}{2}$ to $\frac{3}{4}$; South Crofty, $\frac{1}{2}$ to $\frac{3}{4}$; South Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; Tincroft, $\frac{1}{2}$ to $\frac{3}{4}$; West Basset, $\frac{1}{2}$ to $\frac{3}{4}$; West Fraces, $\frac{1}{2}$ to $\frac{3}{4}$; West Kitty, $\frac{1}{2}$ to $\frac{3}{4}$; West Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; West Pollice, $\frac{1}{2}$ to $\frac{3}{4}$; West Tolgus, $\frac{1}{2}$ to $\frac{3}{4}$; West Seton, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Agor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Basset, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Comfort, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Grenville, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Jane, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Pevor, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Prussia, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Uny, $\frac{1}{2}$ to $\frac{3}{4}$; Wheal Boys, $\frac{1}{2}$ to $\frac{3}{4}$.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, sharebrokers, Queen's Chambers, Market-street (Oct. 20), write:—In most of the classes the markets have shown less activity than has been apparent during the two or three weeks previous; and though during the first few days of the week several fresh advances occurred in speculative stocks latterly, a flat tone is to be noted, which, assisted by sales to realise profits, has caused figures to relapse from best quotations. Notwithstanding the disturbances in Ireland, the markets, business, and the prospects of business seem very little, if at all, affected by Irish affairs, and movements in stocks seem mainly to be ruled by monetary influences, assisted or counteracted by traffic announcements. The number of transactions recorded is decidedly less than those of the two preceding weeks, but figures, on the whole, remain fairly steady, with a conspicuous evidence of strength in coal and iron, &c., and cotton spinning shares.

BANKS exhibit no feature except inactivity, the transactions marked being fewer than for some time past, but price show no falling off; indeed, what few changes there are are all for the better—National Provincial $\frac{1}{2}$, Bank of Liverpool $\frac{1}{2}$, and Manchester and Liverpool $\frac{1}{2}$, all higher.

INSURANCE shares have produced a very meagre number of dealings, prices realised not indicating any special movement; but the alterations reversing the position recorded for some time show a majority of declines, Maritime being $\frac{1}{2}$, Commercial Union $\frac{1}{2}$, Manchester Fire $\frac{1}{2}$, Lancashire $\frac{1}{2}$, Liverpool and London and Globe $\frac{1}{2}$, Queen $\frac{1}{2}$, and Royal (Liverpool) $\frac{1}{2}$ lower; whilst the only instances of advance are Sea Insurance and English and Scottish Boiler Insurance each $\frac{1}{2}$ higher.

COAL, IRON, & MINING.—The upward wave has expanded, and a few concerns hitherto unaffected, or only slightly moved, have come under its influence, but in the concerns which have recently advanced rapidly a full is apparent, for whilst in a few instances figures in these have gone up, in the cases are few, and here and there a little ease from best figures lately marked is to be noticed. Compared with the number of dealings reported for last week and the week before this week's business is small, but taken all round the prices obtained show very little, if any, falling off, whilst quotations again show advances in great majority, though without so many startling changes of late. Bolekows are steady. Ebbw after having rallied to 10½ best point touched recently have again receded, and quotations show a fall of ½. Pelsall Coal, &c., Llynvi and Tondou Coal, &c., Sheepbridge Coal, &c., of both issues, Tredegar, B. and West Cumberland Iron and Steel amongst advances, and Chatterley Iron amongst declines are the chief instances of changes, indeed the fall in Chatterley is the only decline worthy of notice.—Higher: Tredegar Coal, &c., B. 3; Sheepbridge Coal, &c., 2½; Pelsall Coal and Iron, 2; Llynvi and Tondou Coal, &c., 1½; Sheepbridge, A. 1½; West Cumberland, 1½; Staveley Coal, &c., A. 1; Telegraph Construction and Maintenance, 1; Tredegar, A. ¼; and Andrew Knowles and Sons, ½; and several others fractionally.—Lower: Chatterley Iron, 1; Parkgate Iron, ¼; Ebbw Vale Steel, &c., ½; and Canadian Copper and Sulphur, ½.

COTTON SPINNING AND MANUFACTURING have rapidly advanced again, some of the shares at long discounts having been in strong demand, resulting in largely enhanced values being established. At the same time, popular concerns show no falling off, and full prices are obtained on dealings.—TELEGRAPHIC AND TELEPHONE: The former, with very few transactions, show conflicting changes, though there are none of importance. Lancashire and Cheshire Telephone shares, after having been done at par, mark a decline of 6d.—IN CORPORATION STOCKS, &c., little doing, and changes unimportant, a remark which also applies to CANALS.—IN MISCELLANEOUS shares the changes are irregular. Rylands and Sons mark a rise of ½, whilst London and Manchester Plate Glass and Union

Plate Glass are ½ and ¾ lower respectively.—RAILWAYS: During the week decided advances were established in most stocks, but the appearance of dearer money by a fall in the American Exchange caused realisations and consequent reduction, and this has been further assisted by the very general indisposition to enter into transactions. Scotch lines have been very good, especially North British, which have maintained their advance very fairly. Caledonian were unfavourably affected by their traffic decrease, and the same may be said of London and North-Western. Sheffield and their deferred have gone flat to-day, but North Stafford are exceptionally well supported. A continuance of the War of Rates in America has acted adversely on Canadian, and the respective traffics of the Grand Trunk and Great Western of Canada also helped to make prices flat. Americans advanced early in the week, but relapsed on the signs of dearer money; this, however, is not as yet developed, and, as the Times pointed out on Wednesday, we may have a large importation of articles to repay us for our delivery of gold, and so get strengthened. We have against this the Vanderbilt persistency in low rates, so that until some brighter signs appear we may scarcely look for anything to move higher.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, sharebroker and ironbroker (Oct. 3), writes:—During the past week nothing of importance has transpired. Prices remain firm, but business is not so brisk, owing to the uncertain state of the Money Market.

In shares of coal, iron, and steel companies the movements for the week comprise advances of 1½ per share on Arncliffe Coal, 5s. on Ebbw Vale, 2s. 6d. on Chillingham Iron, and 1s. 3d. on Marbella Iron; but Cairnbarrow has declined 5s. per share, Omea and Cleland 3s. 6d.; Glasgow Bort Washington, 2s. 6d.; also has declined from 52s. 6d. to 50s. 3d., owing to realisations after the recent spurt, as well as the state of the money market, but the pressure to all appears now relieved. It must be kept in mind that 50s. is now relatively as low a price as 45s. was three months ago, taking into consideration the reduced production and improved demand, not only for home trade but on American and Continental account. The stock in store in Glasgow now exceeds 600,000 tons. The meeting of the Scottish Australian Company will be on Oct. 28. The estates of the Benhar Coal Company were offered for sale yesterday, first in one lot at 35,000, and afterwards in three lots, but in neither case was any bid made, and the sale had to be adjourned. The shares are at 12s. 8d. to 13s. 6d.; Bolekow Vaughan, 28½; Cardiff and Swansea, 5s. to 40s.; Chatterley Iron, 7 to 8; Chillingham Iron, 70s.; Clyde Coal, 55s. to 58s.; Ebbw Vale, 10½ to 10¾; Glasgow Bort Washington, 4s. 6d. to 5s. 6d. (touched 10s.); John Bagnall and Sons, 5s. to 10s.; Llynvi and Tondou, 10 to 11; ditto, pref., 7s. 6d. to 2s. 6d. dis.; Marbella, 7½ to 7¾; New Sharncliffe, pref., 4½ to 5; Omea and Cleland, 28s. to 30s.; Skerrie Iron, 35s. to 40s.; Steel, 9½ to 9¾; West Mostyn, pref., 15s. to 20s.; and Wigan Coal, 7s.

In shares of foreign copper concerns, Cape and Rio Tinto have advanced 1½ per share, Tarsis 5s. and Huntington 6d.; but Tharsis (New) are reduced 10s.; Tharsis (10½ paid) shares have advanced from 42½ to 43½. 9d. to 43½. 2s. 6d.; Canadian, 31s. to 33s.; Huntington, 45s. 6d.; Pansicillo, 5½; Rio Tinto, 24 to 25; Santa Cruz, 11s. 3d. to 13s. 9d.; and Virneberg, 37s. 6d.

In shares of home mines prices are generally easier. Glasgow Caradon have improved 1s. on the original shares, which have advanced from 24s. 6d. to 26s., owing to the interest taken in the exploratory operations going on at the mine. Wheal Arthurs offered. Wheal Jane have improved, owing to the special report circulated from the captain of Wheal Basset, which is favourable, and hints to a probable resumption of dividends. Caradon Consols are at 15s. 6d.; Caradon Copper, 15s. to 17s.; D'Ereshy Mountain, 30s. to 40s.; Devon Great United, 20s. to 25s.; East Blue Hills, 3s. to 10s.; East Chatterley, 30s. to 35s.; East Devon Consols, 20s.; East Craven Moor, 10s.; East Wheel Rose, 5s. dis.; Goodvever, par to 2s. 6d. prem.; Great Polgoth United, 10s. to 15s.; Gover Consols, 5s. to 7s. 6d.; Great Holway, 5s.; Herodfoot, 5s. to 10s.; Grogwinion, 4s.; Indian Queens, 5s. to 7s. 6d.; Lady Ashburton, 10s. to 15s.; Mounts Bay, 7s. 6d. dis.; New Pevor, 15s. to 25s.; New Penros, 15s. to 20s.; North Bury, 15s. to 17s. 6d.; North Hendre, 4 to 5; New Kitty, 40s. to 50s.; New Wyo Valley, 15s. to 20s.; North Herodfoot, 7s. 6d. to 10s.; Okel Tor, 2s. 6d. dis. to par; Old Shepherds, 5 dis.; Parka Consols, 5s. to 7s. 6d.; Pen-y-rsred, 15s. to 17s. 6d.; Pandora, 13s. to 15s.; Penhalie and Barton, 20s.; Pioneer, 25s. to 25½; Roman Gravel, 12 to 12½; Silver Valley, 5s. 9d.; South Croby, 5s. to 10s.; South D'Ereshy, 6s.; Tamar, 17s. 6d. to 22s. 6d.; Treavean, 5s. dis. to par; Trevine Consols, 15s. to 20s.; United Shepherds Wheel Rose, 6s. dis.; Walkham United, 10s.; West Craven Moor, 40s. to 60s.; West Kitty, 9 to 9½; West Holway, 20s. to 30s.; West Croby, 7s. 6d.; Van Consols and Glyn, 5s.; Wheal Basset, 5½ to 6; Wheal Fortune, 30s. to 40s.; Wheal Jewell, 9s. to 11s.; Wheal Owles, 6; and Xstwith, 17s. 6d. to 22s. 6d.

In shares of gold and silver mines Scottish Pacific are reduced 5s. per share. Richmond easier 15 to 15½; Pitanga unaltered; Akankos are at 2s. 6d. dis. to par; Brazilian Gold, 15s. to 20s.; Cullao "Bis," 12s. 6d. to 17s. 6d.; Colar Gold, 10s. to 12s. 6d.; Central Wynad, 15s. to 20s.; Chile Gold, 12s. 6d. to 15s.; Chontales, 2s. to 4s.; Eureka (Nevada), 5s. prem.; Exchequer, 2s. 6d. to 5s.; Frontino, 65s. to 70s.; Gold of Canada, 10s. to 15s.; Gold Hills, par; Great Southern Mysore Gold, 12s. 6d. to 15s.; Gold Coast, 2s. 6d. to 5s. prem.; Hoover Hills, 15s. to 20s.; Indian Consolidated, 10s. to 15s.; Indian Kingston, 5s. dis.; Indian Trevelyan, 18s. 9d. to 21s. 3d.; Javali, 5s. to 7s. 6d.; Mysore Reef, 13s. to 15s.; New Zealand Kapanga, 7s. to 9s.; Nava de Jadraque, 5s. to 10s.; New Gold Run, 4s. to 6s.; Port Phillip, 4s. to 6s.; and Quartz Hill, 10s. to 15s.

In shares of oil and miscellaneous companies prices are generally better. Broxburn and Young's Paraffin Oils have each advanced 10s. per share, and Uphall Oils 6s. 3d.; but Oakbank Oil is 1s. easier. Clyngwyn Slate Debentures are at 10s.; Langdale's Chemical, 55s.; Lawes' Chemical, 5½ to 6; Milner's Sals, 9½ to 10½; Newcastle Chemical, 50s.; Neuchatel Asphalt (pref.), 45s. to 47s. 6d.; and Uphall Oils have been sold from 8½ to 9.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share brokers, Princes-street (Oct. 20), write:—There was a decided improvement in the price of home railways during the past week, which has been followed by a partial relapse. A comparison with last Thursday's prices shows a rise in Caledonian from 105½ to 106½, in Glasgow and South Western from 115½ to 116½, in North British from 85½ to 86½. Highland remains at 106 cum dividend, which has been announced at the rate of 5 per cent. per annum. Great North of Scotland has been exceptionally weak on the bad traffic, and has receded from 60½ to 59½. In some cases lower prices have been accepted for Preference and Debenture stocks, but North British 4 per cent. Debenture stock has risen from 105½ to 106½. Canadian

railways have been much depressed, and American stocks have been lower. In banks, British Linen has risen from 277 to 279, and Union has receded from 229 to 228. In Scotch insurance companies there are no changes of importance to mention. Arncliffe coal have advanced from 9½ to 11, but that is almost the only change in mining shares.

IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET.

DUBLIN, Oct. 20.—In mining securities Berehavens have been dealt in at 5s. for account. Wicklow Copper received a large share of attention at from 14s. to 18s. for account, and to 17s. and 17s. 6d. for cash. Mining Company of Ireland shares were dealt in at 23½ for account. Railway securities are quiet. Belfast and County Down shares are dealt in for time at 39½. Belfast and Northern Counties shares are firm, having advanced to 42½ from 42½, but were subsequently dealt in at 42½. Great Northern stock is very dull, and has declined to 113 from 114. Great Southern and Western stock is also weak, having receded to 107½ from 108½. Great Western stock is dealt in at 130. Midland stock fell to 79½ from 80½, but finally advanced to 80 and closed steady. In preference securities Great Northern Four and a Half per Cent. stock was dealt in at 112 for account. The Dungannon Four per Cent. stock advanced 10s., to 106½. Great Southern and Western Four per Cent. stock advanced 10s., to 108½. Midland Four per Cent. stock was dealt in at 101. Waterford and Limerick Four per Cent. stock advanced 10s. to 96½. The Five per Cent. stock was dealt in at 49½. In leased lines Dublin and Kingstown were dealt in at 23½, and Great Northern and Western stock at 125½. In debenture securities Cork and County Down Four per Cent. stock was dealt in at 111, Great Southern and Western Four per Cent. stock at 109½, Midland Four per Cent. stock at 107.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (Oct. 19), write:—There has not been much improvement in the markets during the past week. Great Southern closed to-day at 107½, Midlands at 80½, and Wicklow at 78. In banks Nationals remain steady at 23. Provincials were done at 57½ and Munsters at 75s. 6d. Cork Packets are 11½ to 11¾. Gas shares unaltered, at 6½ to 6¾; Goulding's, 8½ buyers; and Daly's have risen to 3½.

NEW GREAT WHEAL VOR—SPECIAL REPORT.

Our correspondent at Helston writes:—The lode continues to improve as the sinking proceeds. The operations now carried on are on the line of the lode, and consist principally of a trial shaft extending east and west about 3 fms. When on the spot the other day I was informed that according to the best local opinion the prospects of this mine are beyond calculation, and that the lode is now worth 700 or 800 per fathom, even though the depth is only 10 fms. from the surface. I also heard that tenders have been sought for the erection of engine-house, engines, boilers, stamping heads, &c. The proprietors are obviously encouraged by the marvellous results of their first operations on the ground, and have determined to carry on the works with the utmost energy. A full development of this mine may, therefore, be expected at once, and if the general opinion does not go astray the New Great Wheal Vor will shortly prove one of the grandest mines opened in the county during the present generation. As is well known, some of the best mines in Cornwall have been self-supporting from the very first, and have not been indebted for their success either to public support or the subscription of the shareholders. In these cases mines have found their own capital. It strikes me we shall find the New Great Wheal Vor will soon belong to this category, and that immediately the machinery is at work the mine will not only pay its way but will also return a handsome dividend to the proprietors.

THE CHANNEL TUNNEL.—*Après le* of the recent visit of M. Léon Say, and M. Raoul Duval to Calais, the Echo du Nord gives an account of the progress being made with the Channel Tunnel. It is no longer a question of preliminary experiments, says this authority, for the work is being energetically and successfully pushed forward, and a section will be ready for inspection towards the end of next month, or the beginning of December. The boring has already been effected to the extent of 1800 metres from the French and 1600 metres from the English side. This makes altogether rather more than one-tenth of the entire distance to be pierced.

IRONWORKS IN BENGAL.—It is stated in the Times that the Indian Government has offered three lacs of rupees for the purpose of undertaking the working and stock of the Bengal Ironworks Company, which is now in liquidation. The liquidator, in reply, has asked for a larger sum, pointing out that the company sunk 15 lacs, and would probably have been successful had the Government assisted it. The Government, however, refuses to increase the offer, and states that its sole object in making it is to try and revive the industry, which it believes to have a good chance of success if prudently and economically managed. It promises to give all legitimate support to any private person or company which may buy the works.

HOLLOWAY'S OINTMENT AND PILLS.—Autumn is proverbially the season of sickness; then the blood requires purification, the digestion demands thorough and attentive regulation, and all the secretions call for correction. Holloway's remedies supply all the necessities for securing health; the one overcomes numerous diseases, sores, ulcers, abscesses, carbuncles, and all visible imperfections, the other acts most potently in cleansing the circulation, strengthening the stomach, governing the liver, regulating the bowels, and reducing the entire system to order. Thus these twin medicaments furnish the most efficient medicine chest available for family use. It is easier through Holloway's discovery, to point out the remedy than to describe the disease; into the former no fallacy can intrude, into the latter prejudice may unwittingly creep.

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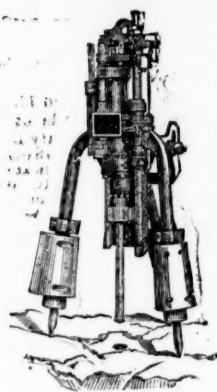
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other machines with sample lots, and finding both quantity broken
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of the opinion that it would be impossible to get a machine suit-
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sure of 29,000 lbs. per square inch. The 16 x 9 machine I am
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I have the honour to inform you that the Briquette Machines work very well. The Briquettes are very well made. I am
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The undersigned, Civil Engineer of Mines, Chevalier of the Legion of Honor, Consulting Engineer for the Mines de Vendin-lezto,
Bethune, Pas-de-Calais, certifies that the Briquette Machinery for making Briquettes of Coal, supplied by Messrs. Yeadon and Co.,
the above Company is working to their entire satisfaction.
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E. LISBET.

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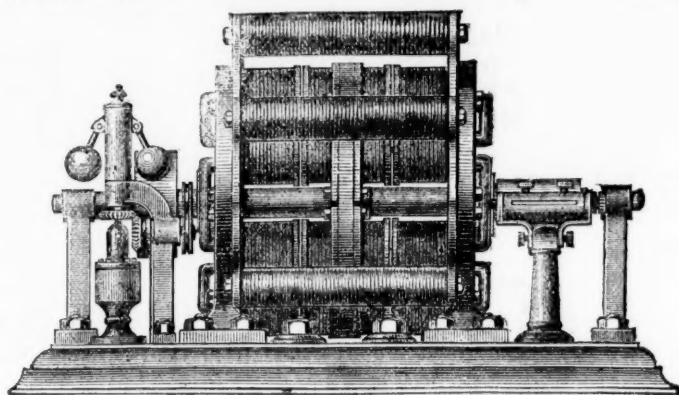
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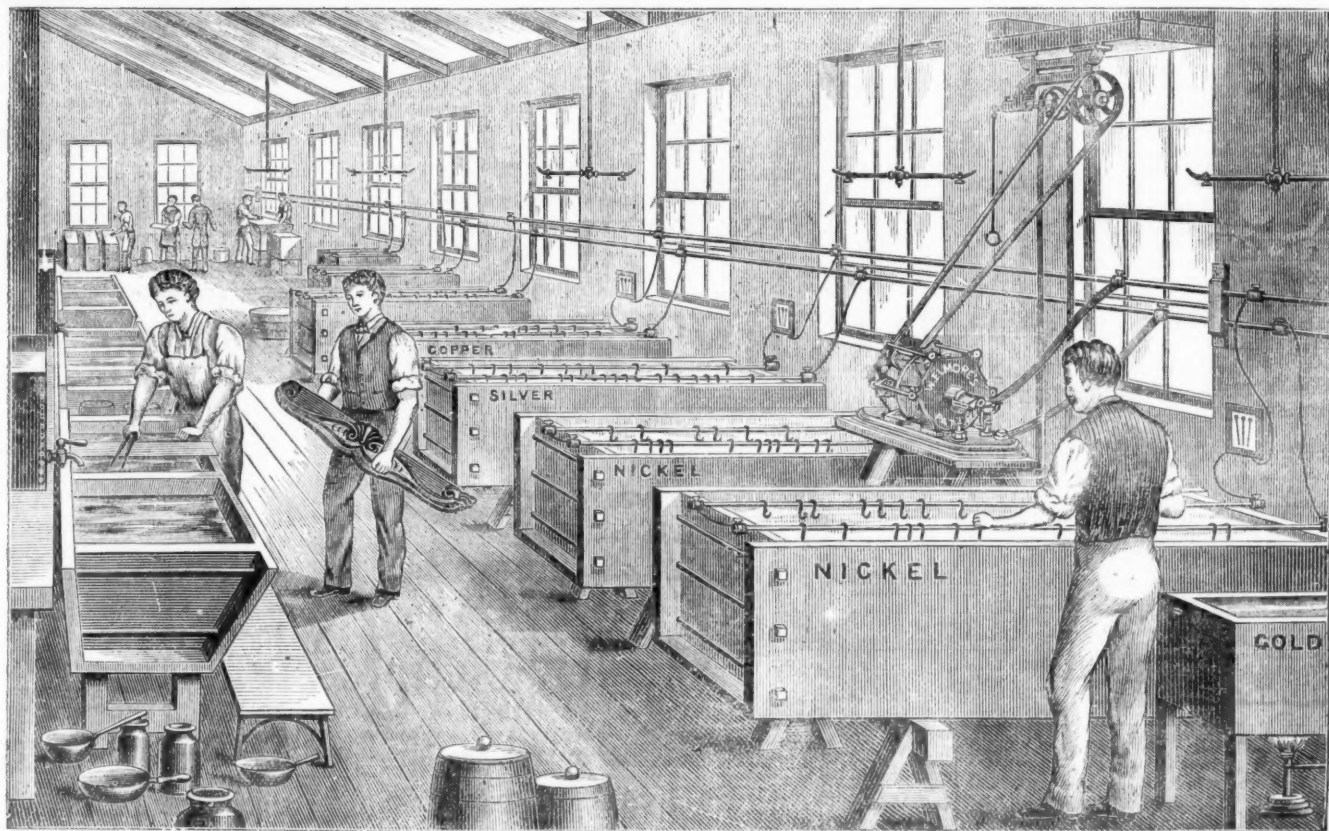
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tricity generated in a dynamo-machine enables one to dissolve nickel and other metals in their own solvents, far more economically, and in greater purity than by the ordinary method of treating metals. Electrical power obtained by the ordinary galvanic battery would be far too expensive for this purpose. The solutions formed by the aid of dynamo-electricity are not only purely and economically made; but they can be produced in far less time, and with comparatively little trouble and attention. To Mr. Elmore is due the honour of having introduced into this country the process of making pure nickel solutions and salts by means of dynamo-electricity. The boon he has thus conferred upon a large industrial class we need not dilate upon."

From "THE IRONMONGER."

"A still further improvement in the deposition of metals has been recently obtained by the introduction of the dynamo-electric machine of Mr. Wm. Elmore, which is in reality electricity produced by motive power. By this means the current is obtained at a much less cost, and I have seen it regulated to such a nicety that the smallest article could be separately coated in a full-sized vat. The deposit is also effected in about one-third of the time taken by a galvanic battery, and for smoothness and regularity of surface is greatly in favour of the dynamo process, which may be known from the fact that all Mr. Elmore's competitors, both in London and elsewhere, are fast adopting his machine in preference to the old process. He has, in addition, supplied it to many large firms throughout the country for electrotyping purposes, and the reports received from them are gratifying to the inventor. Mr. Elmore is also the author of an interesting little work on the subject, which may be read with interest by those who contemplate entering into what is fast becoming an important industry."

WILLIAM ELMORE, 91, BLACKFRIARS ROAD, LONDON, S.E.

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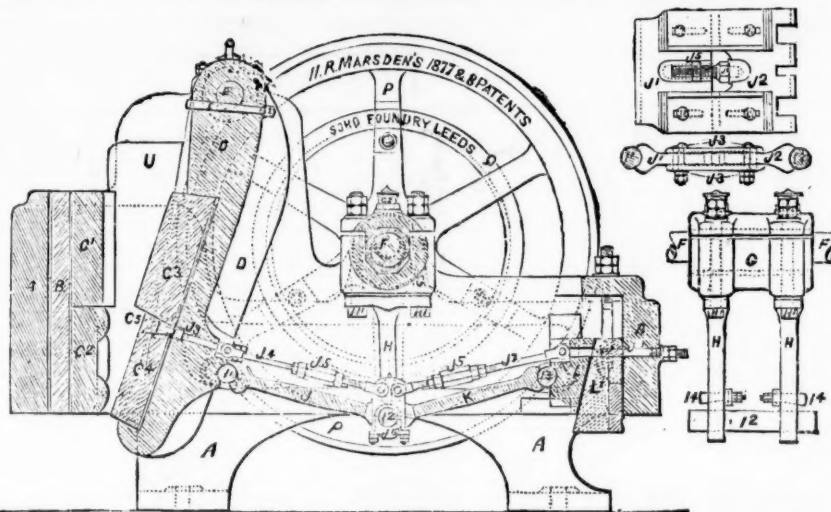
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ONE MEDIUM-SIZED MACHINE.

BLAKE'S STONE BREAKER.—Statement made by the Managing Director of the St. John del Rey Mining Company, Mr. John Hockin, with regard to six months' practical working of Blake's Stone Breaker, affording facility for judging of the relative economy of machine and hand labour in this kind of work, and also of the cost of getting the Stone Breaker to work in difficult places. The price paid to Mr. Marsden for the machine referred to by Mr. Hockin was £180, and adding to this the cost of engine carriage, and fixing, the aggregate cost to the company of the Breaker in working order was £500. By this outlay the company is enabled to dispense with the labour of 55 people, the value of which is £500 per annum. The cost of working the machine could not be more than the wages of about five men (the machine requires but one man to feed it, so that the rest would be for engineer, fuel, oil, &c.), and allowing for interest on outlay and for renewal when necessary, the saving must be enormous.—Mining Journal.

ALL BEARINGS are renewable, and made of H.R.M.'s Patent Compound ANTIFRICTION METAL.

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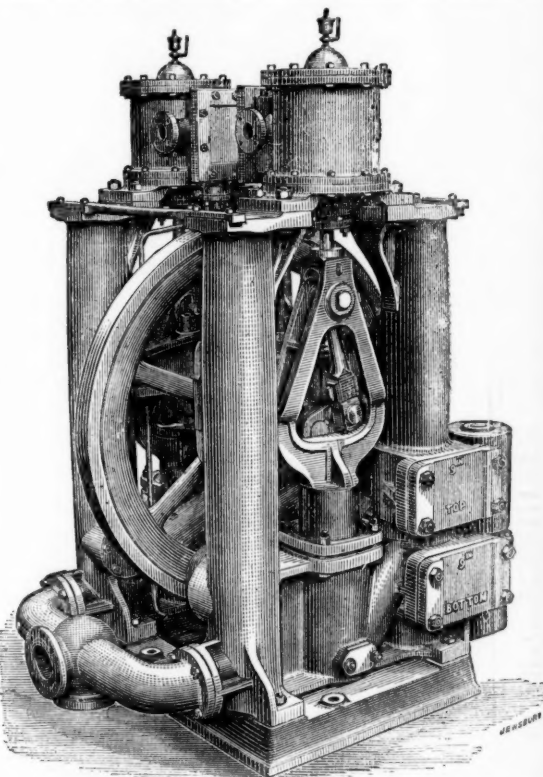
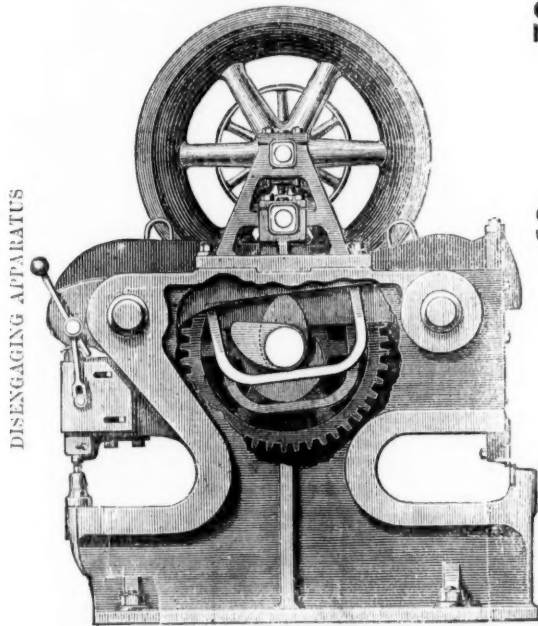
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